

Restoring the Competitiveness of the Hungarian Tax System in the 2010s

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Abstract

In the 2010s, significant changes were made to the Hungarian tax system to restore competitiveness. The focus of economic policy in the first half of the period was on addressing the adverse debt and labour market situation inherited from the previous decade, while in the second half of the period the focus shifted to boosting investment and increasing work productivity. The changes to the tax system focused on five main areas: reducing the overall level of taxation, shifting the focus of tax revenues from income to consumption, restructuring the taxation of labour income to encourage employment, reducing and restructuring business taxes to encourage investment and improving the efficiency of tax collection by exploiting the potential of real-time data collection. While the started changes are still underway in a number of areas, significant progress has been made in each of these areas. In addition to other factors, the changes to the tax system outlined above have largely contributed to Hungary entering the 2020 decade with much more favourable equilibrium, growth, employment and investment indicators than 10 years earlier. With regard to long-term trends, the COVID-19 crisis does not require a correction, and competitiveness factors may even become more important in the process of global economic rebalancing in the context of recovery.

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List of abbreviations

VAT	value-added tax
eFIP	Employment Information Programme
EKÁER	Electronic Public Road Transport Control System
e-PIT	electronic personal income taxation
EU	European Union
Eurostat	statistical office of the European Union
EVA	simplified entrepreneurial tax
GDP	gross domestic product
KATA	flat rate tax of small taxpayers
KIVA	small business tax
SME	small and medium-sized enterprise
NTCA	National Tax and Customs Administration
OECD	Organisation for Economic Co-operation and Development
MoF	Ministry of Finance
POS terminal	point-of-sale terminal
PWC	PricewaterhouseCoopers
SZÉP card	Széchenyi Recreation Card
PIT	personal income tax
CIT	corporate tax
SSC	social security contribution

1. Summary

In the 2010s, the Hungarian tax system underwent a major transformation, with a focus on improving the competitiveness of the tax system. These were in part to make up for previous backlog: in the previous decade, Hungary had missed out on reforms that took place in other countries in the region with similar objectives, while the complexity of the tax system had increased significantly, leading to a significant relative decline in its position by the beginning of the new decade.

In economic policy terms, the decade can be divided into two phases, as reflected in the tax measures. In the first half of the decade, the economic policy focused on overcoming inherited disadvantages, including in particular high budgetary deficits and external indebtedness and low labour market activity. Over the decade, these problems have been significantly eased, so that the focus has shifted to increasing labour productivity and, in line with this, to stimulating investment. The handling of the COVID-19 crisis that ended the decade required a number of temporary measures, but did not change the main direction, and the expected reorganisation of global production chains in the recovery period will further increase the importance of investment stimulating measures.

Five key areas for changes made over the decade:

I. Tax cuts in focus

For the tax system as a whole, the main objective was to reduce the level of the tax burden, which was high in regional standards; while in the period of budget deficit reduction this could only mean maintaining the tax burden as a share of GDP, by the end of the decade even a significant reduction was possible.

II. Focus on consumption taxes

As for the structure of the tax system, the focus was on a gradual shift in tax revenues towards taxes on consumption and harmful activities, which are less harmful to growth. While at the beginning of the period this went hand in hand with an increase in some consumption taxes, in the second half of the period the decline in the budget deficit and the whitening of tax revenues allowed a further shift to be achieved almost exclusively through a reduction in taxes on labour and capital income. In addition, over the period there was an increasing emphasis on reducing the excesses of the tax system and increasing its transparency.

III. The reduction and simplification of labour taxation

As for the taxes on labour income, their level and structure changed: In 2011, the single-rate family tax system was introduced. The change was aimed at removing incentives for inactivity and income concealment, improving the targeting of employment incentives and enforcing family policy aspects within the tax system. The six-step tax reduction agreement concluded in 2016 also allowed for a significant, predictable long-term reduction in the tax burden on labour income, as a result of which the tax burden on labour were reduced to a competitive level in the region.

IV. Reducing taxes on businesses and making them competitive

In terms of business taxation, the focus was on reducing the burden and encouraging investment, especially for SMEs and key export sectors for growth. The corporate tax rate was reduced in two steps to 9 percent. Significant changes were also made to the tax structure, with a view to encouraging investment and increasing competitiveness. The creation of KATA (flat rate tax of small taxpayers) and KIVA (small business tax) also significantly improved the tax environment for SMEs. Over the decade, the taxation of companies was also significantly affected by changes in the international tax

environment, which provided tax authorities with a number of new tools to combat international tax avoidance schemes.

V. Reducing tax administration and whitening the economy

Finally, in the area of tax administration, the focus was on making extensive use of the opportunities offered by digitalisation. The various tools that allow real-time data collection (online cash registers, online invoicing, EKÁER, etc.) contribute significantly to a more efficient selection of risky taxpayers and to the whitening of the economy. In addition, these developments will also enable the tax administration to strengthen its service character, to create services that effectively assist taxpayers (e.g. pre-filled tax returns, targeted information on favourable provisions) and could be the basis for a number of market developments that will reduce administrative burdens.

In the following chapters, we will focus on specific areas of the tax system to present the theoretical considerations, situation assessments and empirical results that led to the changes, listing the most important measures, and providing a brief assessment of the current situation and the work that still needs to be done.

2. A bird's eye view of the tax system

2.1 Theory: structure is important as well as overall load

The criteria for a good tax system have long been discussed in the economic literature. Adam Smith laid the foundations back in the 18th century when he formulated the four characteristics of a good tax system:

- fair, i.e. broad and proportionate,
- certain;
- efficient, i.e. it involves minimum administrative costs for the state;
- convenient, i.e. it involves minimal transaction costs for the taxpayer.

Authors on the subject have since made many additions to these, for example, they have addressed issues of horizontal and vertical fairness, the justification for incentives vs. a neutral tax system, the transparency of rules and processes, etc., but the basic criteria remain valid.

According to the tax theory literature, taxes on corporate profits have the largest distortive effect on the economy, followed in order by taxes on labour income, consumption, wealth and harmful externalities. Taxation distorts economic decisions and can therefore have a negative impact on growth. In addition to meeting economic policy objectives, the design of a suitable tax system should take into account low administrative burdens, the size of the tax burden and the structural efficiency of the tax system.

Profit taxes hamper productivity growth mainly by disincentivising investment. These – unlike consumption taxes – lead to the multiplication of the tax burden in the period between the primary acquisition of income and its consumption, as they re-tax the returns generated by the investment of already taxed income, thus reducing the propensity of economic agents to save and invest. Thus, even in a closed economy, these taxes are the main constraint on long-term growth potential. Moreover, in the case of a small open economy, their harmful effects are further strengthened by the high international mobility of working capital investment.

Taxes on labour income mainly restrain economic performance by influencing decisions to enter the labour market and work intensity. In the labour market, supply effects are the main determinant in

the long run, but in the shorter run, or when wage rigidities are present that hamper adjustment, the impact of these taxes on labour demand can be significant. Moreover, their distorting effect is highly dependent on the structure of the tax categories: for example, the disincentivising effect of a progressive income tax may be very different from that of a single-rate tax.

Consumption taxes are less of a hindrance to investment and savings, and are therefore more growth-friendly. The theory suggests that they could also theoretically contribute to reducing labour intensity by reducing the real value of labour income. However, this effect is much more indirect and is further reduced by the fact that they have to be paid on spending income from other sources than (declared) work, and thus have a broader base. In addition, the gradual shift of the focus of the tax system towards sales taxes leads to a reorganisation of income towards active groups, thereby also stimulating economic growth. A further competitive advantage is that they are usually levied on a destination basis, so that export products are exempt, while imports are subject to a similar burden as domestically produced goods. However, the structural design of these taxes – in particular the structure of preferential rates and exemptions and the price elasticity of individual products – is also important in terms of distorting effects.

Of the wealth taxes, recurrent property taxes have the least impact on economic growth, as they have little influence on saving and investment decisions.

The most important advantage of taxes on harmful externalities is that, in addition to generating revenue for the state, they also help to suppress a socially harmful activity. Typical examples are environmental taxes, but also health protection taxes. However, they have the practical disadvantage that they can generate only limited revenue in most cases, and thus often add to the number of small taxes.

Special mention should be made of taxes on various transactions, whose position in the above order is more uncertain. These are generally considered in the theoretical literature to be more distortive than taxes that have a similar basis but are payable on net income/profit/value added. (i.e., for example, a tax on capital transactions is more distortive than one on profits on the same capital assets.) However, this distorting effect also greatly depends on the structure of the given market. (For example, the difference between the effect of VAT and that of a general tax based purely on turnover depends strongly on the structure of production chains.) However, these taxes have the advantage that they are typically simple, difficult to manipulate and, because they are broad-based, can generate significant revenue even at relatively low tax rates.

It is also important to note that the above ranking does not take into account the distorting effect of tax avoidance and tax evasion. If the payment of taxes is not properly enforced, tax avoidance can give some companies a competitive advantage that can lead to distortions much greater than the imperfect design of the tax structure.

A system with low tax rates across a wide range of taxpayers and tax bases is generally considered to be better in economic terms, as it reduces the distorting effects of taxation on employment, economic activity, consumption and investment, thus leading to higher output and ultimately higher welfare. At the same time, tax systems usually include many and significant reliefs, modifications or differentiated rates of taxation for a variety of reasons: e.g. to offset negative externalities, to redistribute income, or to favour a subset of society or economic agents. However, differentiation is necessarily distortive, both because it results in higher tax burdens for non-beneficiary groups and because a separation of the two groups inevitably leads to certain degree of unfairness.

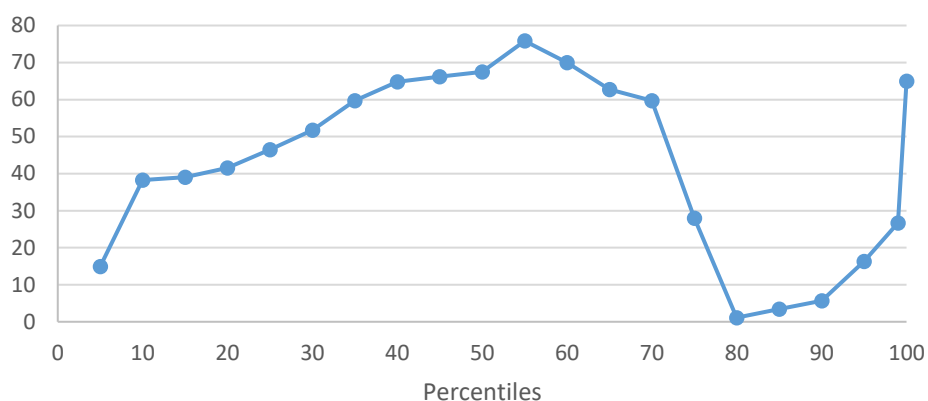
In addition, the high number of tax categories, as well as reliefs and preferential tax regimes, reduce the transparency of the tax system and increase the cost of tax administration for both taxpayers and authorities. The introduction of new tax categories may be justified by a number of legitimate economic policy objectives, but the number of tax categories may also be significantly increased if they can only be used to finance a specific purpose (e.g. ring-fenced funds, local government and “earmarked” revenues that can be spent on specific purposes). The preservation of a significant proportion of reliefs may be justified by strong social, family or economic policy arguments. At the same time, tax reliefs, after their entry into force, are integrated into the tax system and the budget planning process and do not need to be reviewed or redesigned on an annual basis, so that in many cases reliefs that are no longer crucial may be maintained for a long time. It is also often the case that the detailed rules for some similar taxes or reliefs differ for no particular reason. In many cases, this is simply because they were introduced at different times, usually at the proposal of different proposers.

Therefore, it is generally worth developing uniform tax rules that are as simple as possible for a broader range of taxpayers and to deviate from them only where targeted intervention is socially justified. It is also important that the instrument chosen is not only effective in achieving the objective, but also proportionate and efficient. If any of these criteria is not met, the rule in question should be changed, phased out or, if justified, the problem should be addressed by other means outside the tax system. The calculation of reliefs, derogations or, in short, tax expenditures, and the examination of the criteria should be carried out in a transparent and regular manner, because a broad tax base and low rates through a simpler tax system are not only desirable from the point of view of economic incentives, but also because low effective and administrative burdens increase social acceptance, thereby improving tax compliance.

In international professional debates, the view that rising income inequalities are harmful to economic development in the long term has been reinforced in the years following the crisis. The broadening of income inequalities is fuelled by a number of economic trends that have over the past decades adversely affected mainly less qualified workers in the more developed countries of the world. This process includes the growth of skill premia, the concentration of profits linked to technological progress and digitalisation, the relocation of some activities to lower-wage countries, and the obsolescence or disappearance of some medium-skilled jobs as a result of technological progress.

The role of income inequalities has thus been highlighted primarily by their increase in more developed countries, as illustrated by the famous “elephant curve” of Lakner-Milanovic (2013). It shows that over the 20 years between 1988 and 2008, the incomes of the bottom ¾ and top 1 percent of the global population increased significantly, while those in the 75th to 99th percentiles, i.e. the global “upper middle class”, saw their incomes rise much less. Although the authors’ findings have since then been refined by a number of studies, the deterioration in the relative position of this “upper middle class” has also proved quite robust in more recent estimates. In the more advanced economies, the rise in income inequalities has also caused significant social tensions. This is one of the main reasons why, in recent years, an increasing number of international studies and recommendations have also investigated the redistributive effects of policy proposals, including tax policy, emphasising the importance of strengthening this role.

Change in income by global income percentiles between 1988 and 2008



Source: Lakner-Milanovic (2013)

However, there is no complete consensus on the optimal policy mix. Research suggests that different benefits can be more effective and efficient than the tax system in terms of redistribution.¹ In addition, taking into account labour market and consumption incentives, a restructuring which may seem regressive in the short term could also help to reduce poverty and contribute to a faster increase of incomes among low-income families in the longer term, e.g. by promoting employment. From this point of view, it is therefore more appropriate to assess the impact of reforms in a comprehensive way, taking into account incentives, rather than looking at the partial redistributive effects of individual measures.

2.1.1.1 Box: Experience gained from successful international reforms

Although most OECD countries have undergone a series of tax reforms over the past two to three decades, fundamentally relatively **few of them have been able to reduce the level of tax burden as a share of GDP significantly and on a sustained basis.** Apart from the Visegrád Countries, Sweden, Ireland and the Netherlands have achieved sustained success in reducing tax centralisation rates, even with some visible corrections due to the 2008 crisis. After an overview of these international experiences, we believe that the following lessons can be highlighted:

While the **need for significant tax reforms often arises in times of crisis or slow growth**, the **durability of the tax cuts** needed to reduce the tax burden is **greatly enhanced if the reform is implemented in a period of rapid growth.** In this context, a balanced or surplus budgetary situation also helps to ensure the durability of tax cuts, as sharp expenditure cuts are usually not necessary and public finances remain manageable until the positive dynamic effects of the reform can be seen.²

The success of tax reforms is further enhanced if they are based on a coherent strategy and take a comprehensive approach to the system as a whole, rather than focusing on individual tax categories. A broad-based restructuring with the same principles will also help to address the inevitable “breaches of interests” that will arise, increasing the economic and societal acceptance of the reform. The reduction of tax deductions has often been accompanied by a simplification of the tax system, as the reduction of the public burden has allowed to compensate for the phasing out of previous targeted measures. **Reforms aimed at broadening the tax base and reducing the general tax rates also tend to be more socially acceptable.** Thus, **targeted interventions that are still justified are better**

¹ Joumard-Pisu-Bloch (2012); Fournier-Johansson (2016)

² Brys (2011)

managed outside the tax system in the form of direct grant schemes, which is also more advantageous from a budgetary point of view, as subsidies explicitly budgeted are less likely to be 'stuck in'. Subsidies within the tax system more often become a long-term part of the system, often outliving their own justification, because their subsidy content is less transparent and more difficult to determine.

While there are examples of successful reform programmes that operate with gradual steps (e.g. Ireland), **several successful reform episodes can be identified in which steps were taken in one or two waves** (Sweden, Estonia, Slovakia). This latter approach also helps to maintain the coherence of the reform.

Sweden (1991 and 2006)	Estonia (1992, 1999–2000)	Slovakia (2004)	Ireland (2008–2012)
<ul style="list-style-type: none"> • Few rebates, few and simple tax categories • Due to harmonised benefit rules, the need for information and control of social security benefits is smaller • Returns and processes optimised (for the needs of the majority) 	<ul style="list-style-type: none"> • Single-rate system • Radical corporate tax transformation • Focus on neutrality and growth • Low number of taxes, simple (short) laws • High levels of eGovernment and IT education for society 	<ul style="list-style-type: none"> • Simplification, unchanged tax burden • A shock-like restructuring, part of a wider set of actions • Economic success, but not socially accepted, so the reform halted and was partially reversed • Failure to reform the contribution system is a deficiency 	<ul style="list-style-type: none"> • Reduction of the administrative burden without substantive tax reforms • Systematic work • Numerical targets (designated methods) • Cooperation between tax and other authorities • Administrative and legislative steps • Time-consuming, but can be effective

Another important lesson learnt from successful international reforms is that **comprehensive, simplification-oriented reforms often require other supporting measures**. Typical examples include the adaptation of social security benefit rules, the development and interconnection of IT systems, and, for example, in the case of a significant expansion of electronic public administration services, the education and information of those concerned.

Successful episodes of administrative reduction show that **processes and returns should be designed to meet the needs of the majority** and to deal with issues that may affect only a small number of taxpayers (e.g. data requests for enforcement of detailed rules, verification) in separate procedures, on a separate return page or even in other returns. As a general principle, the design of the processes should also aim at achieving a level of "just what is needed" rather than completeness. In addition, it is of paramount importance that all the processes and procedures related to taxation should be managed through a single channel wherever possible (e.g. all public charges through the central tax authority), as this can help to standardise processes and communication and eliminate redundant data requests.

2.2 Developments in the 2010s

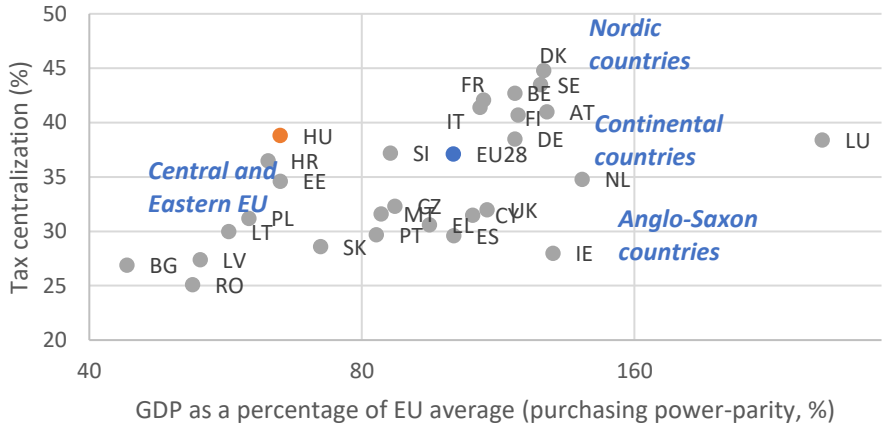
2.2.1 Initial situation: the world has passed us by

In general, the countries of the region³ seem to be more competitive than Western European countries in terms of taxation level and tax structure. This is partly because these countries typically relied on

³ In our study, we make regional comparisons with the eastern EU Member States (Bulgaria, Czech Republic, Estonia, Croatia, Latvia, Lithuania, Poland, Romania, Slovenia, Slovakia, Slovakia)

capital imports in recent decades, which put their tax systems under greater pressure regarding competitiveness, and partly because of the greater difficulty of collecting higher taxes in the face of lower tax compliance.

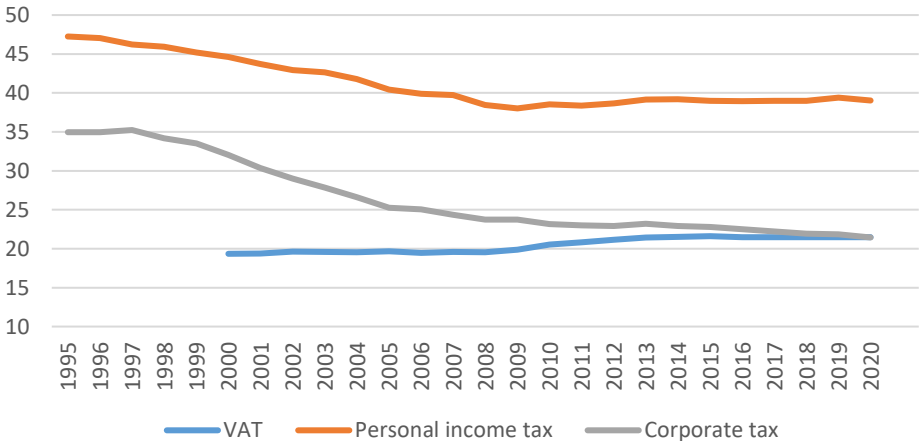
Taxation as a % of the GDP and economic development, 2009



Source: Eurostat

Although the Hungarian taxation level was not considered outstanding among all EU member states even at the beginning of the decade, this indicator was found to be particularly high in comparison to countries of the region. This posed a serious competitiveness issue relatively to the immediate competitors. The budgetary adjustment in 2007 also added significantly to the size of tax burden, by about 3 percentage points. Although a reduction of 2 percentage points was seen in the 2010 election year, this was unsustainable in the long term as it was accompanied by a renewed growth in the budget deficit.

Average of main top tax rates in EU28 countries (%)

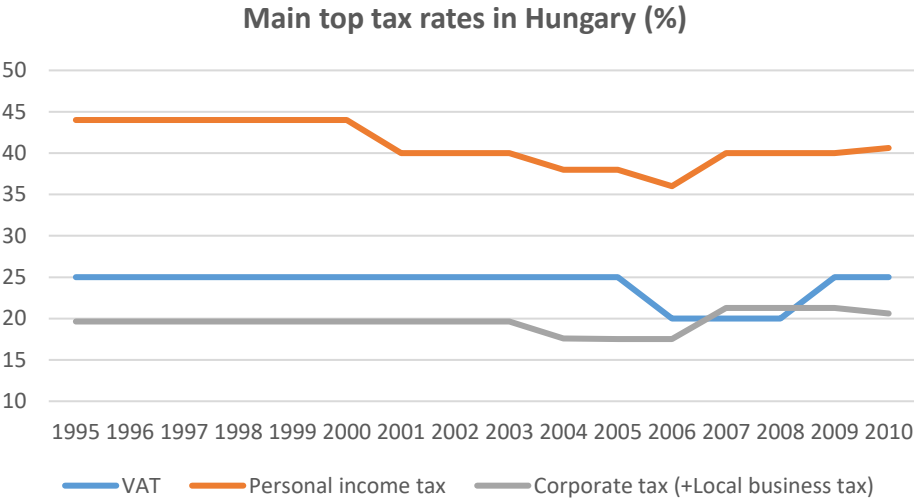


Source: Taxation trends

In recent decades, especially before the 2008 crisis, international trends in the restructuring of tax systems have also been largely geared towards strengthening competitiveness aspects. In this context, income tax rates, such as corporate and personal income tax, have generally declined, while consumption taxes, in particular VAT, have tended to increase. After the 2008 crisis, with increased

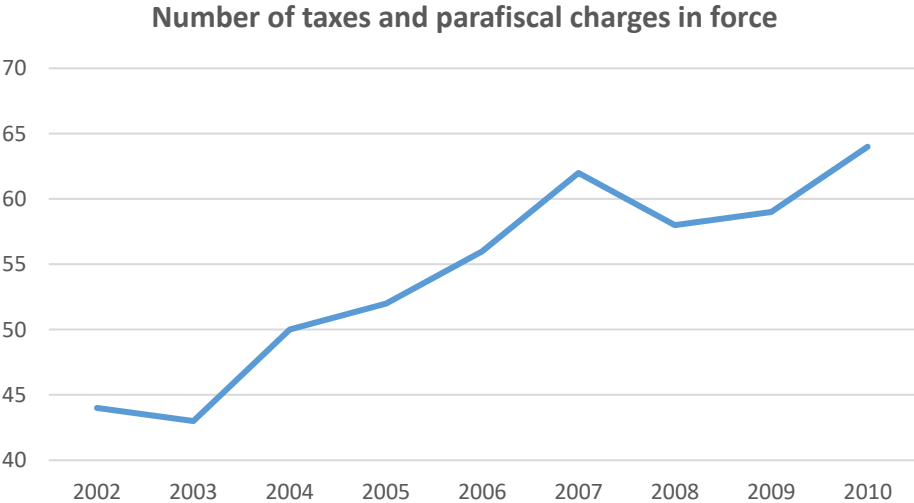
focus on equality aspects, this trend slowed down significantly for income taxes and even stopped for personal income tax, but no fundamental turnaround took place.

Hungary continued to rely relatively heavily on consumption taxes already in the 2000s. The tax burden on capital was not excessive, but the high tax burden on labour income was a serious competitive disadvantage. Also, no substantial progress towards a more competitive tax system was made during the 2000s: the main tax rates remained essentially stagnant during these years, resulting in a relative lag by international standards. The correction of the relative position deterioration could only take place in the 2010s.



Source: Taxation trends

Budgetary revenue need and the economic factors shaping the tax system have also significantly increased the complexity of the tax system, as illustrated by the fact that the number of tax categories and tax-like revenues in force increased almost one and a half times in the 2000s. The growing complexity of the tax system has inevitably been accompanied by an increase in the administrative burden and has made it more difficult for taxpayers to understand the system.

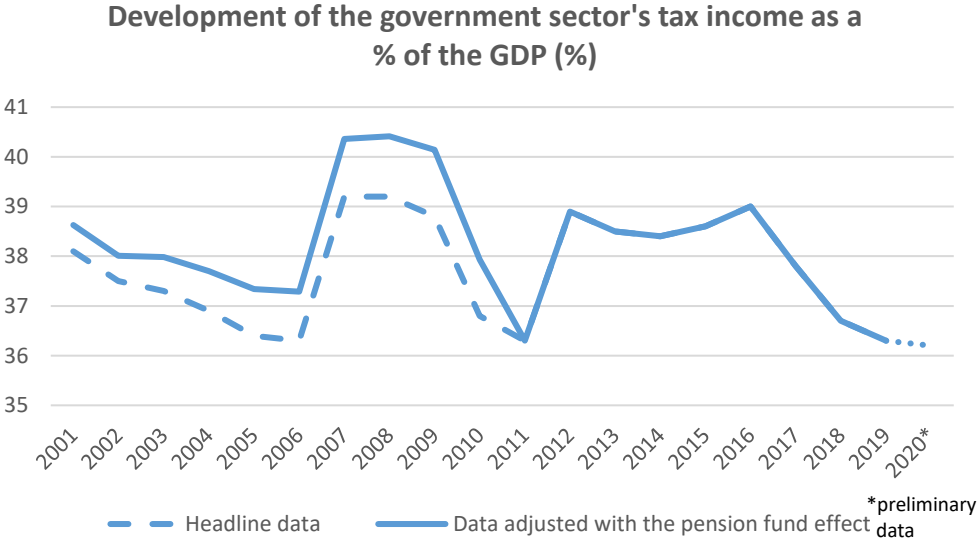


Source: Calculation of the Ministry of Finance

2.2.2 Directions and reforms: on the way to a more competitive tax system

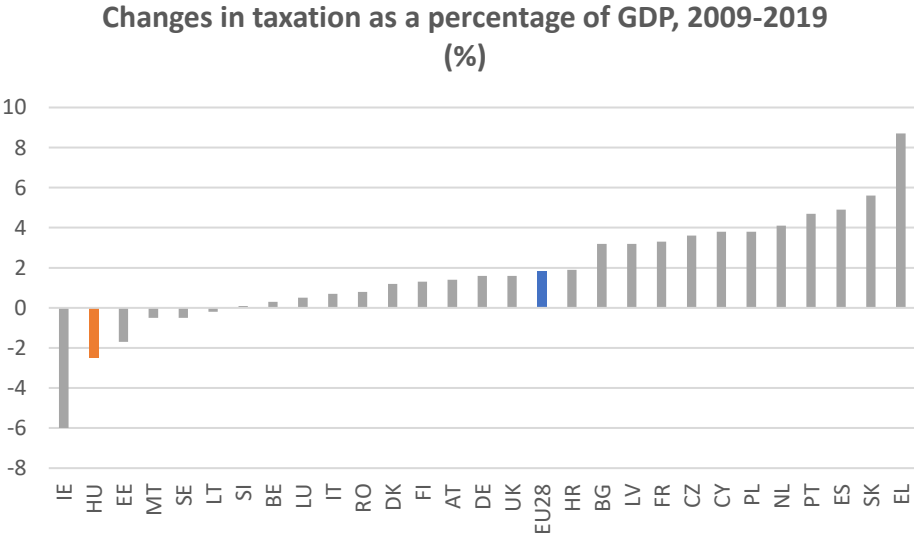
Even during the time of fiscal consolidation, the Hungarian tax burden as a share of GDP remained below the pre-crisis levels, which was a significant achievement. However, the indicator could only

be reduced after the budgetary consolidation, in the second half of the decade. Against the downward trend in tax rates, the decline of the indicator was significantly slowed by the whitening of the economy over the decade, which is, however, a fundamentally positive development, since the reduction of the grey economy increases tax revenues without prejudice to competitiveness and mitigates the distorting effects of tax evasion.



Source: Eurostat, calculation of the Ministry of Finance

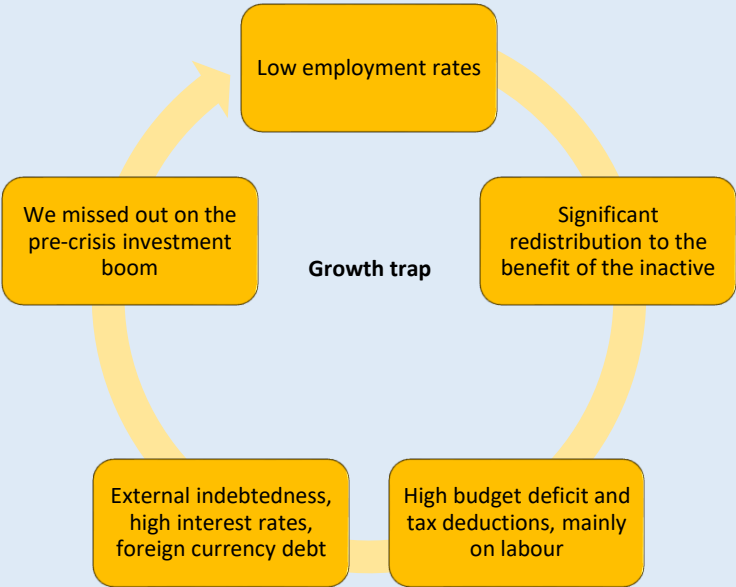
In international comparison, however, the reduction of tax burdens to GDP in the decade is considered significant, especially as in the wake of the crisis, most countries typically experienced a rise in this respect. According to Eurostat data the taxation level in Hungary decreased by 2.5% between 2009 and 2019 which is the 2nd largest decrease among the EU member states.



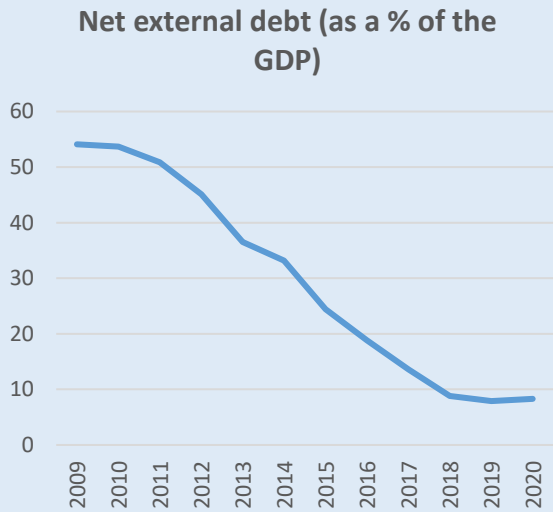
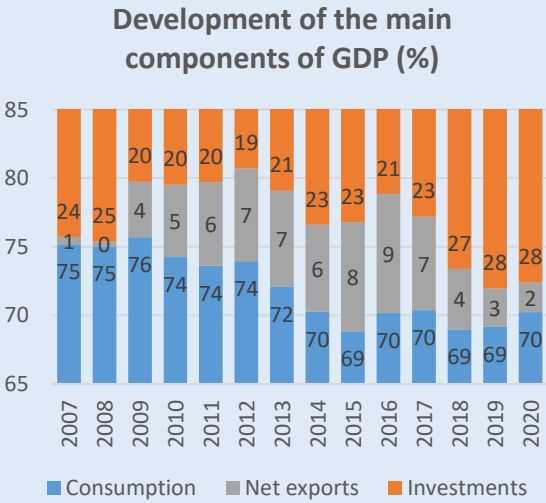
Source: Eurostat

2.2.2.1 Box: macroeconomic trends in the 2010s
 By the end of the 2000s, the Hungarian economy was stuck in a growth trap. The old-age and invalidity pension scheme, misaligned incentives and weak supervision of social benefits contributed to low labour market activity. Thus, even after the shock of the political systems change, employment remained persistently low, consistently among the lowest among the EU Member States. Low labour

market activity has been associated with high redistribution ratios and hence high tax rates and large budget deficits. The budget deficit was not financed by the household sector, which also accumulated significant debts, and the Hungarian economy became indebted to the rest of the world. These factors also had a negative impact on business activity, which also hampered employment growth. Hungary thus missed out on the period of rapid growth seen in other countries in the region prior to the 2008 crisis, and after the crisis it had no room for manoeuvre to mitigate its effects.



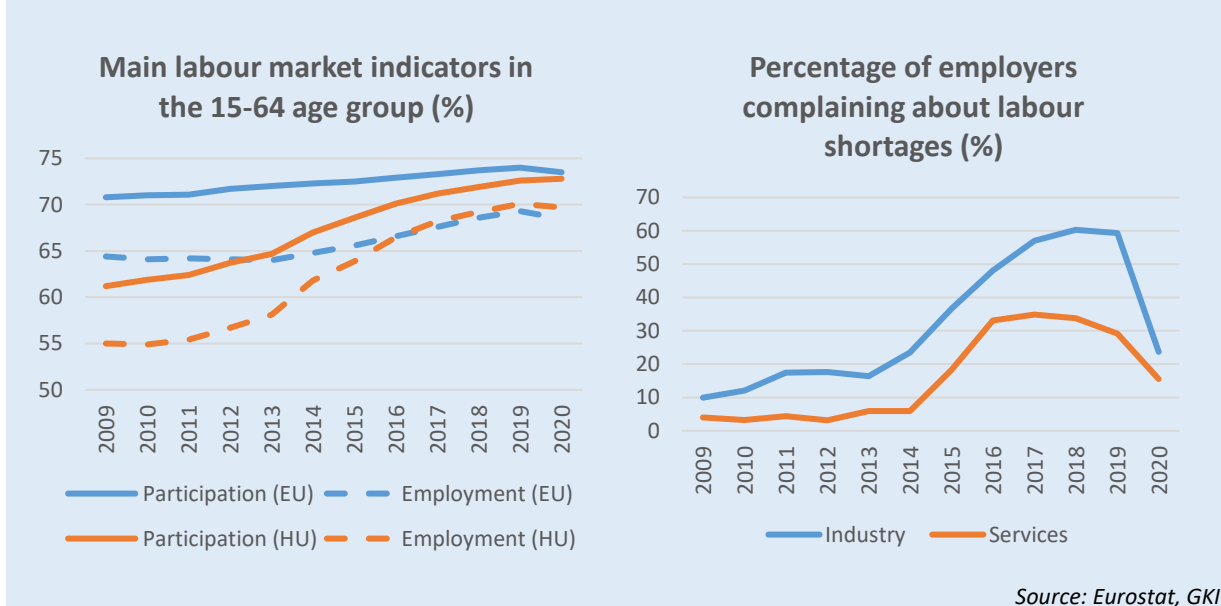
The 2010 decade can thus be divided into two periods in terms of economic policy. In the first half of the period, economic policy focused mainly on overcoming inherited disadvantages, i.e. consolidating the budgetary position, increasing labour market activity and reducing accumulated external debt. The need for budgetary consolidation and increasing labour supply made rapid and in many cases drastic measures necessary, including in the tax system. The tight fiscal room for manoeuvre has given room for reorientation of the tax structure rather than a significant reduction in the overall tax burden.



Source: Eurostat, MNB

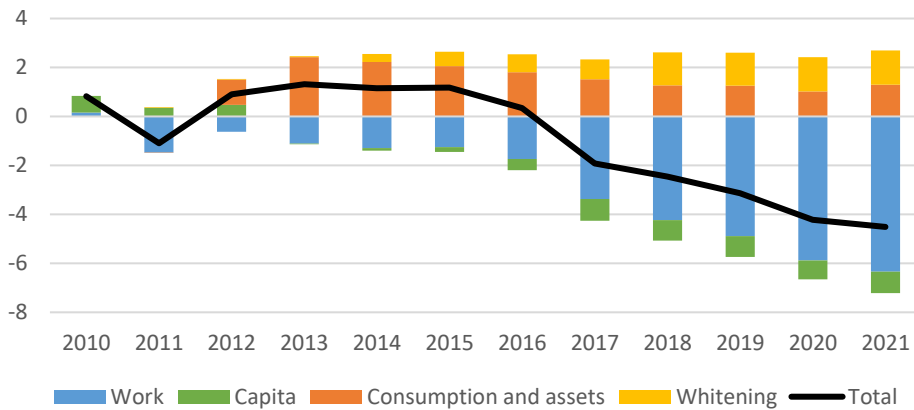
By the second half of the period, budgetary processes consolidated and the measures to whiten the economy had started yielding results, opening the way for a faster reduction in the tax burden on the

economy as a whole. Employment and participation rates caught up with the EU average, unemployment fell significantly, thus employment growth slowed down, and firms increasingly cited workforce shortages as a factor constraining growth. The main source of growth became thus increasingly the investment and productivity growth, allowing wage growth to accelerate in response to employment growth. Following the reduction in accumulated debt, lending activity could return to normal and the massive current account surplus started to narrow as investment demand increased. In this environment, the focus of tax policy shifted towards stimulating investment, increasing predictability and improving tax administration services. At the end of the period, the COVID crisis involved a significant economic downturn and necessitated the introduction of temporary measures to protect jobs, which also had a negative impact on the budget balance. However, the positive developments in participation and investment rates and in external debt over the decade did not lead to a major turnaround, and the change in the macroeconomic environment that determined fiscal policy in this respect proved to be permanent.



The fiscal policy measures introduced in the 2010s gradually shifted the focus of the tax system away from taxes on income and towards taxes on consumption. At the beginning of the period, this was accompanied by an increase in VAT and excise duty rates and the introduction of new taxes. In the second half of the period, however, while income taxes were reduced at a faster pace, there was already a limited possibility for targeted tax cuts in these taxes in areas where economic policy considerations made this necessary, as efforts to whiten the economy matured.

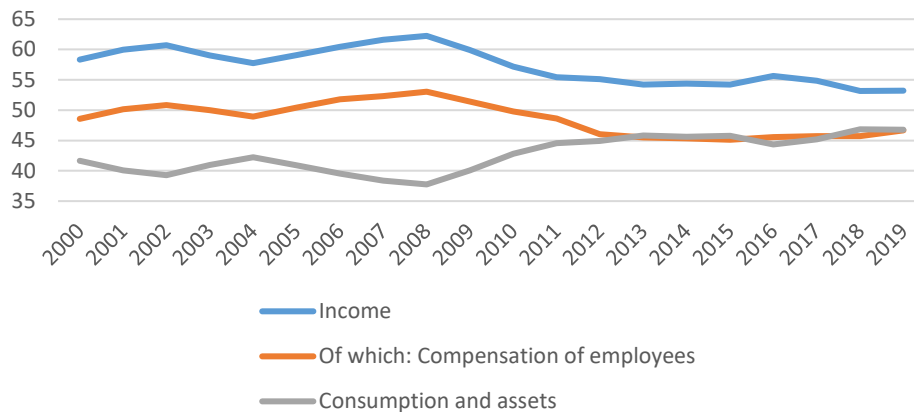
Static revenue impact of tax measures as a percentage of GDP by tax types since 2010 (%)



Source: Calculation of the Ministry of Finance

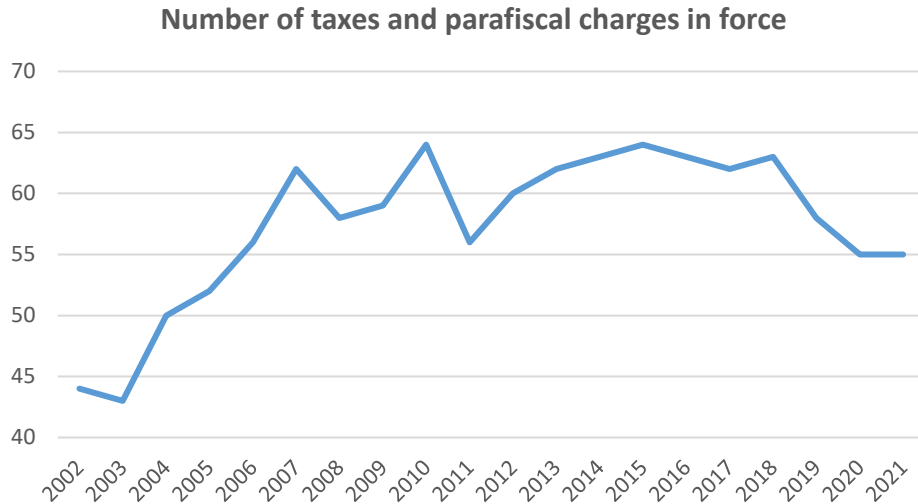
The shift in the tax structure is less visible in the revenue data, but this is mainly due to the significant increase in declared labour income over recent years, which has outpaced GDP growth and offset the impact of the tax rate cuts in revenue.

Tax revenue composition as a percentage of total revenue (%)



Source: Calculation of the Ministry of Finance

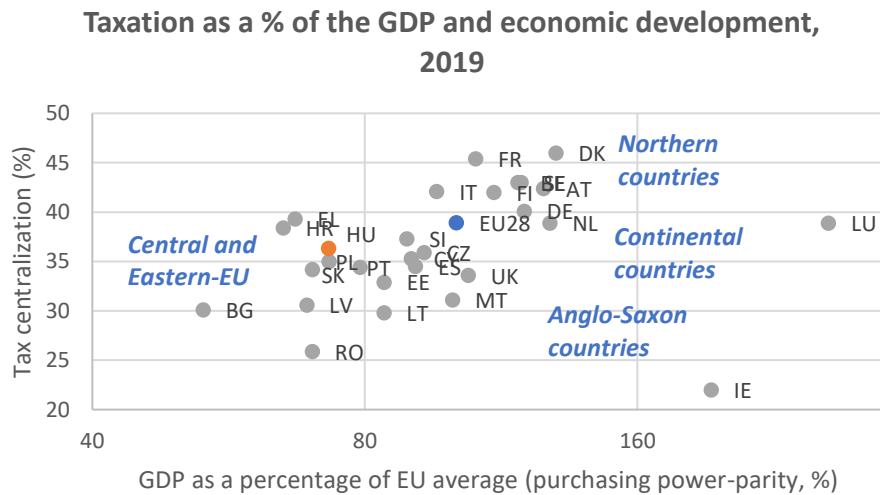
Already in the first half of the period, the tax policy aimed to eliminate taxes and regulations that had become unnecessary; thus, many taxes generating minor revenues were abolished. However, the need to adjust the budget at this time also made it necessary to introduce several new public dues. During the consolidation in the second half of the period, more opportunities opened up to develop measures to simplify the tax system, many of which required more thorough preparation, including the reduction of the number of taxes in force. This was realized by the abolition of smaller taxes (the credit institution levy, cultural tax, the 75% special tax on the employment termination of private individuals, simplified entrepreneurial tax), and by the merge of taxes on partially similar bases (accident and insurance tax, social contribution tax, healthcare contribution, energy tax and excise duty, employer contributions).



Source: Calculation of the Ministry of Finance

2.2.3 Snapshot: beyond the halfway point

Due to the improvement in recent years the tax burden is not considered outstanding anymore in comparison to countries at a similar development level, but is still among higher ones (although in the EU it is below the average).



Source: Eurostat

There has also been a significant shift in tax rates. In the process, Hungary has made significant improvements in the competitiveness of business taxation, and in some areas is already among the international leaders. At the same time, tax rates on labour income have declined from the previous high levels to the ranges that are common in other countries in the region, but Hungary is still not among the most competitive ones.

Main top tax rates in Hungary (%)



Source: Taxation trends

Further reductions in the level of tax deduction, with a focus on the tax burden on labour, will therefore remain an important objective in the coming years. (The measures already decided and announced may also play a role, see the chapter on the income taxes of private individuals.)

There is still work to be done to simplify the tax system: the number of taxes remains well above the millennium level and the tax system is complicated by a number of different rebates and provisions with similar objectives, the technical parameters of which could be harmonised to improve transparency; however, this process is considerably slowed down by the time need for consultation with the stakeholders.

2.2.3.1 Box: Measures taken to address the COVID-19 crisis

At the outbreak of the COVID crisis in 2020, Hungary's balance and vulnerability indicators were much better than at the beginning of the 2008 crisis, and there was therefore greater scope to cushion the impact of the crisis through economic policy instruments. As Hungary is a small, open economy, general demand-increasing measures increase to a large extent the demand for imports. Compared to larger economies, this weakens the impact of such measures on the domestic economy, and economic policy has therefore made only limited use of these instruments. Thus, the measures taken have focused on preserving jobs and production capacities in the most affected sectors, targeted stimulus to certain sectors with high domestic value added and strengthening the long-term growth potential of the economy.

In order to preserve jobs, protect and then relaunch the economy, economic policy has introduced significant **temporary measures** to help businesses stay afloat, including in the tax system. Thus, in the months of the lockdown, a significant part of the tax and contribution burden on labour in the most affected sectors was waived. In order to support the most profoundly affected tourism sector, the tax burden on SZÉP cards was temporarily reduced, the blanket sum of allowances was increased and the tourism development contribution was suspended. The VAT rate on housing construction was temporarily reduced again to 5 percent in order to provide a targeted stimulus to the construction sector and protect its capacity. To support liquidity for businesses, the deadline for submitting tax returns and paying annual tax was postponed to September, the deadline for VAT payments to SMEs was shortened and a new possibility to apply for a one-off deferral of payment was introduced.

The longer-term measures to help recover from the crisis again focused on stimulating investment. This is all the more important because the lessons learnt from the crisis could lead to a degree of

restructuring of global value chains, with the most attractive investment locations emerging as winners. During the crisis, economic policy therefore sought to take permanent measures that are consistent with the long-term fiscal strategy. In 2020, among other things, the next step of the six-step wage agreement was brought forward, reducing the social contribution tax rate to 15.5%. The restrictions on the development reserve available under corporate tax were also significantly relaxed, with profits set aside for investment becoming fully tax-free in the year in which the reserve is created.

3. Income taxes of private individuals

3.1 Theory: it is important to take account of elasticity when designing the tax structure

Specialist literature considers labour taxation to be the most harmful after corporate profit taxes, but the impact depends strongly on the structure of the tax as well. Whereas a highly progressive and a not quite consciously calibrated income tax system can have a significant distorting effect through restraint on performance and income concealment, a system designed to take account of the elasticity of income has a much smaller distorting effect (see the box on the tax elasticity of labour income).

In recent years, many international sources have called for an increase in the progressivity of income taxes to strengthen income redistribution. Usually the main argument is that if high incomes result from some market imperfections, rent-seeking behaviour or superiority in terms of bargaining power, the negative incentive effect of a progressive tax burden is reduced and thus may be economically beneficial.

In contrast, however, the upper end of the income scale tends to show stronger behavioural responses, so the introduction of a progressive system may entail significant efficiency losses and lower than expected redistributive and revenue effects. **International research suggests that the maximum of the Laffer curve is around a marginal tax wedge of 50-60 percent⁴.** Above this level, further increases in the combined rate of taxes and contributions will therefore lead to revenue losses in the longer term due to behavioural effects, but even at rates approaching this level, only small additional revenue gains from tax increases are expected.

Economic policies that aim to stimulate investment and growth are more effective in reaching their goal mainly through favourable corporate taxation and a reduction in the progressivity of the tax system, while incentives for various savings schemes are less effective. This is because, in the case of capital income of private individuals, discounts on different investments are estimated to influence only the choice between different forms of savings rather than the amount of income spent on such savings. At the same time, the overall tax rate on capital income is not an irrelevant factor, as it can have a significant impact on the propensity to keep (or even attract) financial savings domestically.

3.1.1.1 Box: the tax elasticity of labour income

The theoretical literature on taxes on labour income generally suggests that policy makers should take into account the intensity with which, as empirical research shows, certain groups of employees respond to tax incentives when designing tax rates.⁵

Estimates suggest that the average tax rate on income mainly affects decisions to enter the labour market, i.e. participation and employment rates.

⁴ IMF (2015)

⁵ Mirrlees et al. (2011)

A more significant employment effect related to the average tax burden is mainly observed for groups with a looser link to the labour market. These are mainly low-productivity employees, but also include those who have relatively good livelihood opportunities as inactive compared to their earnings in the labour market. Examples of the former are career starters and employees in low-skilled jobs, while the latter include second earners in families and workers in retirement.

It is important to note that high tax rates could also encourage tax avoidance: employees becoming (pseudo) entrepreneurs and realising income as capital gains can reduce budget revenues.

In addition to the above, keeping the average tax rate low may also be justified for high earners and internationally mobile workers. This includes, for example, highly qualified researchers and top athletes.

The marginal tax rate per unit of additional income compared to the average tax rate on income affects labour intensity (i.e. the number of hours worked and the efficiency of wage policy instruments to motivate workers) **and wage concealment in particular.**

The elasticity of the declared tax base is, according to available international estimates, particularly significant for high-income taxpayers (on the average, a 1 percentage point change in the tax rate changes the tax base by -0.4 percent).⁶ Previous Hungarian studies have found somewhat lower elasticities.⁷ **Research by the Ministry of Finances based on Hungarian data found elasticities close to estimates in the international literature for higher-income taxpayers, but also found more significant elasticities for workers earning close to the minimum wage.** For the latter group, this is presumably mainly due to wage concealment.

The economic policy implication of these results is that the **macroeconomic effects of the introduction of a single-rate tax system may have been more favourable than previously expected based on estimates of the response of high-income groups only.** Based on model calculations, our new estimates suggest that the single-rate tax reform will improve the government balance in the long run and raise GDP by 5 percentage points. The estimated high wage elasticity among low-income earners implies that replacing the tax credit with targeted incentives could also have positive effects. Indeed, the shrinking of the tax credit (i.e. the amount of the credit decreases as income rises) raises marginal tax rates for lower-productivity employees with below average wages. Our new estimates therefore suggest that **they may be better served by a tax incentive system targeted on the basis of characteristics other than declared income than by an income-dependent tax credit.**⁸

3.2 Developments in the 2010s

3.2.1 Initial situation: strong progressivity, poor labour market incentives

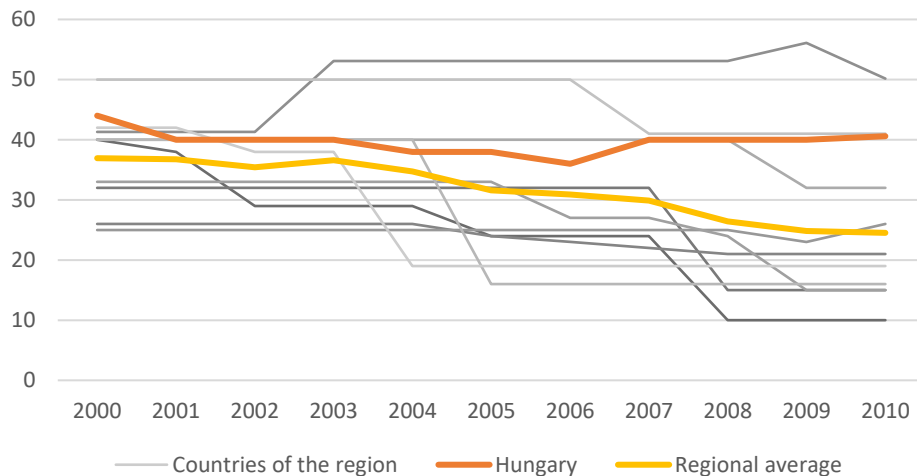
In 2010, the Hungarian tax and contribution system was highly progressive by international and regional standards. The relative competitiveness of the tax system was gradually worsened by the fact that in the decade before the crisis, top tax rates in other countries in the region had been gradually declining (the single-rate tax reforms also largely dated back to this period) while Hungarian tax rates remained almost unchanged.

⁶ Gruber-Saez (2002)

⁷ Bakos-Benczúr-Benedek (2008), Kiss-Mosberger (2014)

⁸ Varga-Nobilis-Svraka (2020)

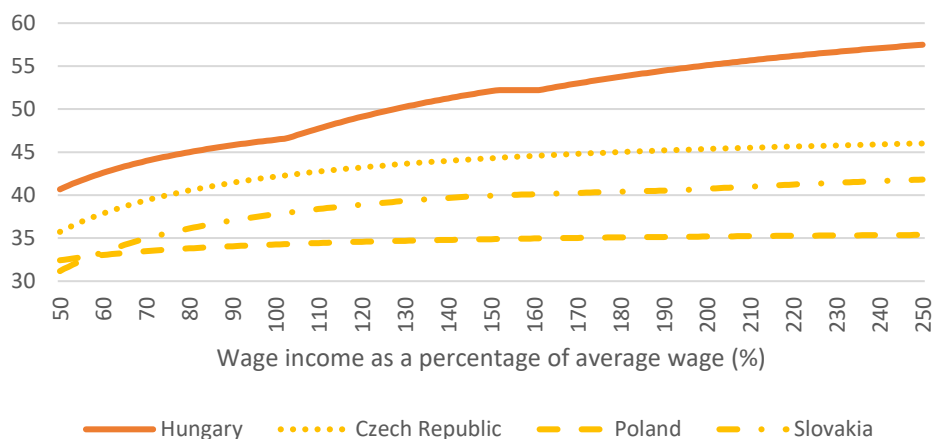
Top PIT rates in the region (%)



Source: Taxation trends

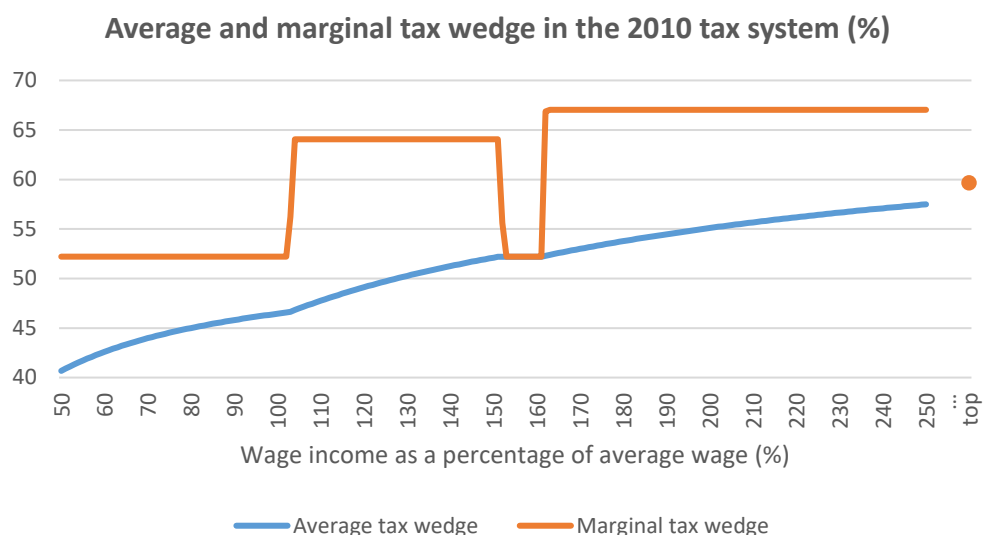
The personal income tax system had a dual structure, meaning that the progressive income tax rate applied only to consolidated income, while capital and certain other incomes were taxed at different rates. The complexity of the system was increased by the fact that these rates also differed depending on the type of income. The dual nature of the overall tax and contribution system was reinforced by the fact that social security contributions were not included in the capital income base. Dual tax systems have the advantage of less hindering investment than a (so-called comprehensive) tax system that applies a uniform progressive rate to all incomes, but they are less effective in reducing inequalities, as capital income tends to be concentrated in the hands of taxpayers with the highest income.

Evolution of the tax wedge as a function of wage level in the 2010 tax system (%)



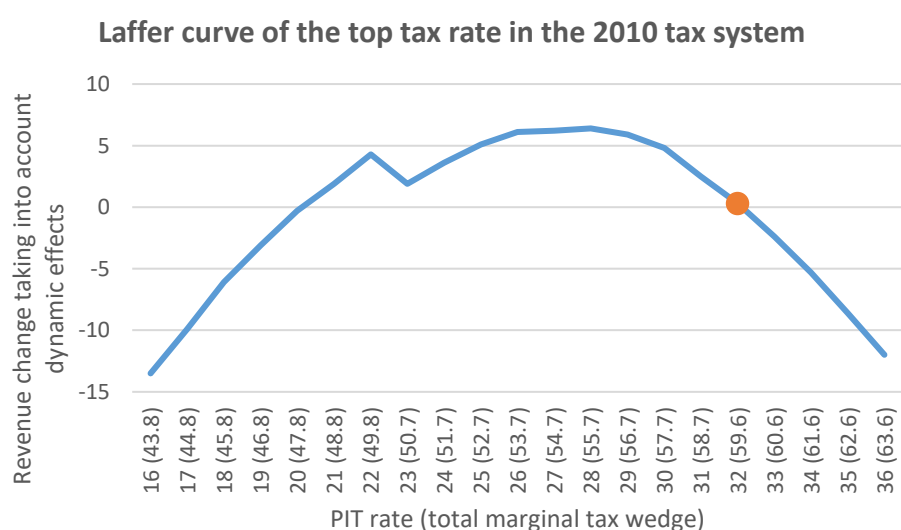
Source: Taxing Wages

Although the 2010 changes to the tax schedule were specifically focused on reducing the tax burden on average wages (also reflected in OECD statistics), the marginal tax wedge on labour income (i.e. the tax burden per unit of additional income) was 64% at just above the average wage and 67% in the higher income bands. At the same time, for employees with the highest income, the tax burden was reduced slightly to 60 percent by the introduction of the institution of the contribution ceiling, which put the top 2 percent of taxpayers at an advantage.



Source: Taxing Wages

The top tax rates have thus reached or even exceeded the maximum of 50-60 percent recommended by the international literature, and, according to model simulations based on income elasticity estimates, have also exceeded the peak of the Laffer curve. Thus, high top marginal tax rates could not (or only marginally) generate additional revenues for public finances, taking into account longer-term behavioural responses, and could only reduce inequalities by worsening the situation of higher income earners, while no longer generating redistributable funds for lower income earners.



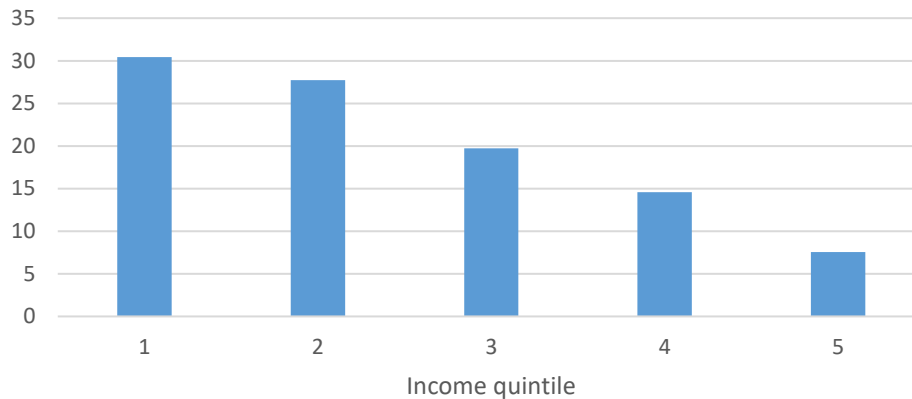
Source: PM calculation based on the Benczúr-Kátay-Kiss (2012) model

Meanwhile, strong progressivity for lower income earners has also contributed significantly to tax concealment. Available estimates, which for technical reasons are more likely to be a lower bound estimate, suggest that income concealment may have affected 50% of minimum wage earners.⁹ At the same time, our estimates suggest that employees earning close to the minimum wage, in addition to the highest earners, also responded strongly to the incentives in the tax system (see box on tax elasticity of labour income). Meanwhile, the redistributive efficiency of the benefits for low-income earners was also undermined by the fact that available data suggest that a significant share of this

⁹ Elek-Köllő-Reizer-Szabó (2012)

group lives in a middle- or high-income household as second earners, i.e. ones with no special social needs.

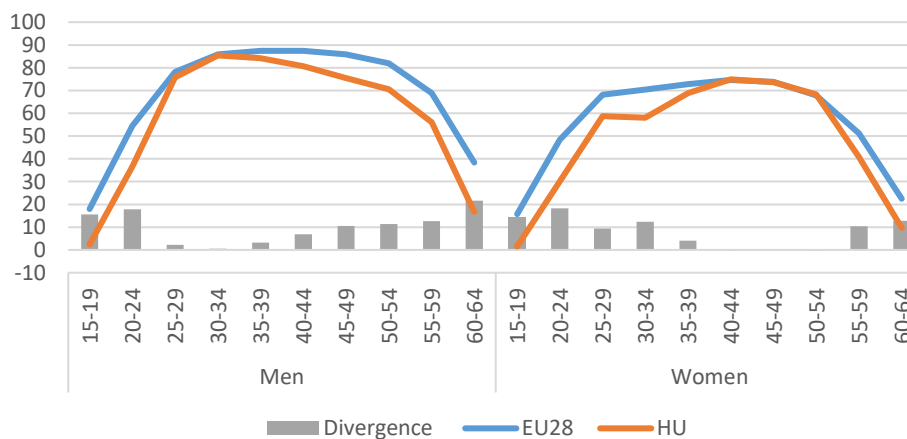
Distribution of people with income below HUF 100,000, 2008 (%)



Source: Household Budget and Living Conditions Survey (HBLs) data collection

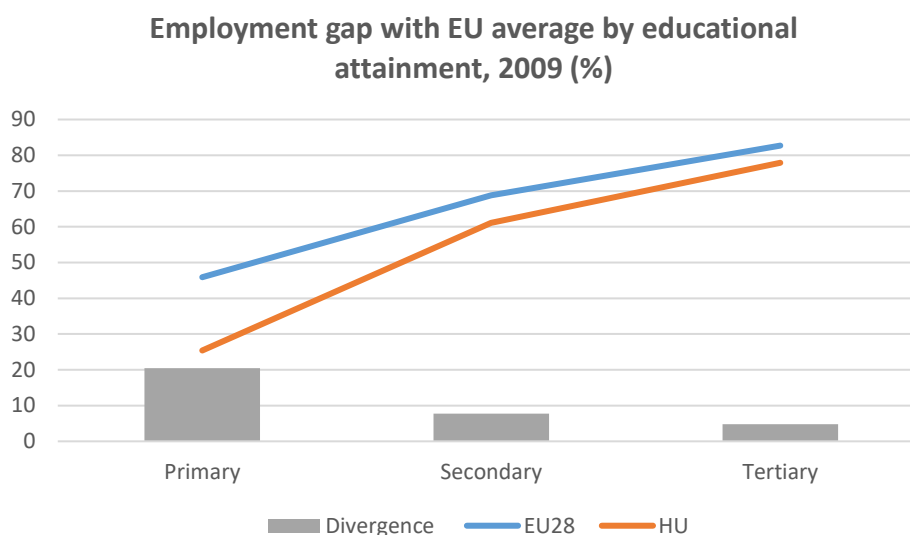
Although family policy elements were largely phased out of the tax system before 2010, parents with at least three children were still entitled to a HUF 4,000 per child allowance as a remnant of the previous support system. The system was also complicated by the introduction of super-grossing in 2010, which was only applied to the calculation of personal income tax rates, while contributions and burdens on employers continued to be based on the previous gross wage.

Employment rate and gap with EU average by age and sex, 2009 (%)



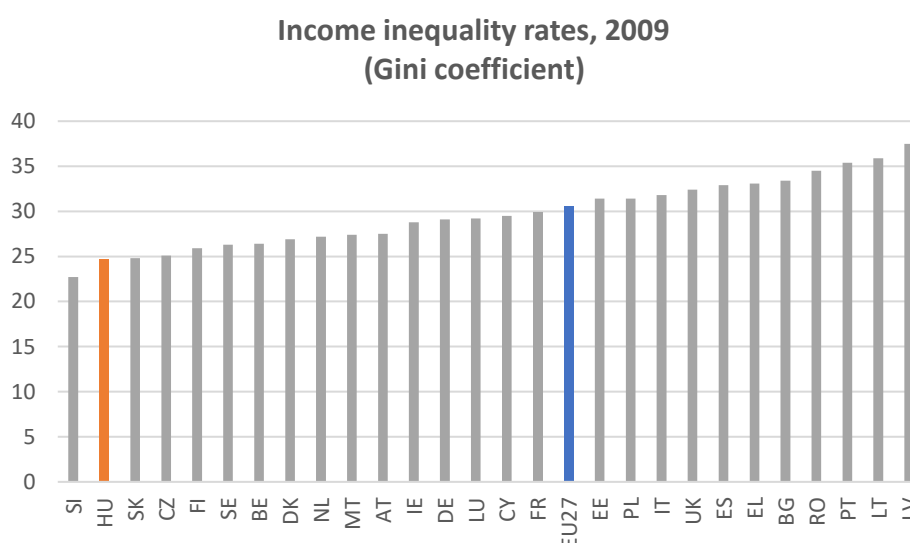
Source: Eurostat

In addition to the level of tax deductions from labour income, we believe that their structure was also part of the set of problems that led to the low employment and significant wage concealment in the 2000s. However, to remedy this in a targeted and effective way, it was also important to recognise that these problems did not affect different segments of the labour market in the same way. While the employment rate of highly qualified men of prime working age was barely below that of Western European countries, the lag was much larger for young people, older workers, unskilled workers and mothers with young children.



Source: Eurostat

However, in terms of inequalities, Hungary was in a favourable position by international standards: the Gini coefficient measuring inequalities was the second lowest among EU countries in 2010, which allowed for a change in the tax system, which was highly progressive by international standards.



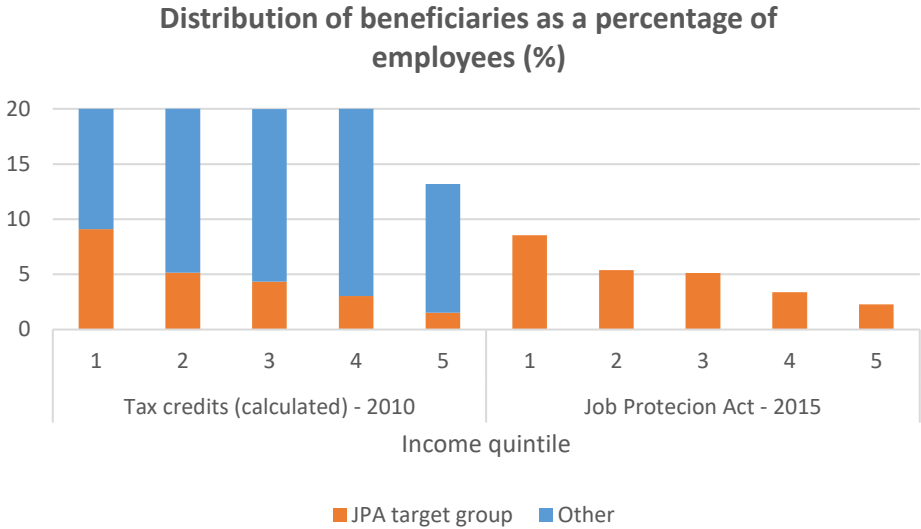
Source: Eurostat

3.2.2 Directions and reforms: a total change of approach

As a first step in the reforms, the government that took office in 2010 introduced a single-rate family tax system. The previous rates of 17 and 32 percent on combined income and 20 and 25 percent on various types of capital income were replaced by a uniform rate of 16 percent. Subsequently, the favourable contribution ceiling for the highest income earners was also abolished, making both the tax and contribution systems fully linear as a general rule.

The benefit system for the employment of low productivity workers has also been radically overhauled and substantially better targeted. As for personal income tax, the general tax credit for all was abolished, while new, more targeted incentives were introduced in the burdens on employers. These specifically focused on labour market groups where employment was significantly below the average in more developed countries (young people, older people, unskilled workers, young mothers, the long-term unemployed, career starters). The allowance in the burdens on employers provided greater

flexibility in the wage agreement, thus reinforcing the job-creating effect of the allowances, while their targeted nature allowed them to be kept for higher income levels so as not to create incentives to conceal income.

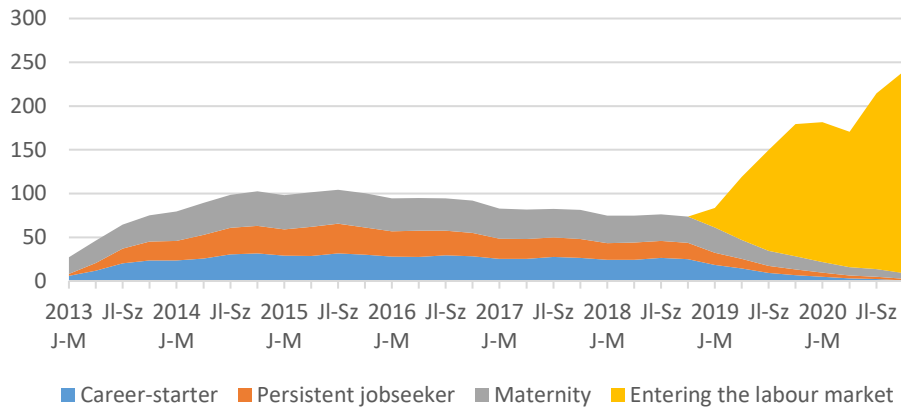


Source: NTCA, calculation of the Ministry of Finance

From 2019 onwards, the targeting of the allowance system was further improved, drawing on lessons learned and adapting to the changed labour market situation. The reform of the tax and benefit system and the economic recovery led to a significant improvement in employment in the original target groups in previous years, while the emerging workforce shortage has justified the promotion of entry into the labour market for new groups. In addition, an ex-post impact assessment carried out by the Ministry of Finance concluded that the allowances had a significant impact on employment, especially for unskilled, career starter and newly re-entering workers on the labour market.¹⁰ The restructured allowance system therefore focused more strongly on these groups. The allowances for under-25s, career starters, young mothers and the long-term unemployed were replaced by the discount of new entrants into the labour market, which is available for all employees who have not earned an income from work for at least 6 months in the 9 months preceding the start of employment. Thus the previous target groups were extended to include the long-term inactive. The fact that the NTCA can now check the conditions of the new allowance and automatically notify employers of this has significantly reduced the administrative obstacles to taking advantage of the allowance. The allowance for unskilled employees remained essentially unchanged. The allowance for workers above the age of 55 was estimated to have become less effective at that time and was discontinued, but the conditions for employment during retirement were substantially improved. The group was thus exempted from social contribution tax and individual contributions, made also possible by the fact that their social security benefits were already covered by their pensioner status.

¹⁰ Svraka (2019)

Number of people receiving temporary benefits that promote jobseeking (thousand persons)

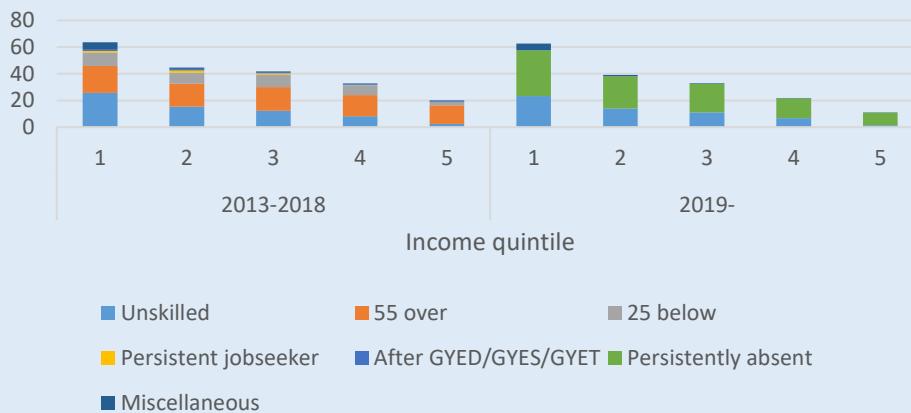


Source: NTCA

3.2.2.1 Box: distributional effects of the restructuring of job protection allowances

The target groups of the Job Protection Action were disadvantaged workers and employees less closely connected to the labour market. The allowances were not phased out for high incomes, but as illustrated in the left block of the figure below, the Job Protection Action targeted workers in lower income brackets, mainly around the minimum wage.

Share of beneficiaries per income quintile before and after the 2019 changes (%)



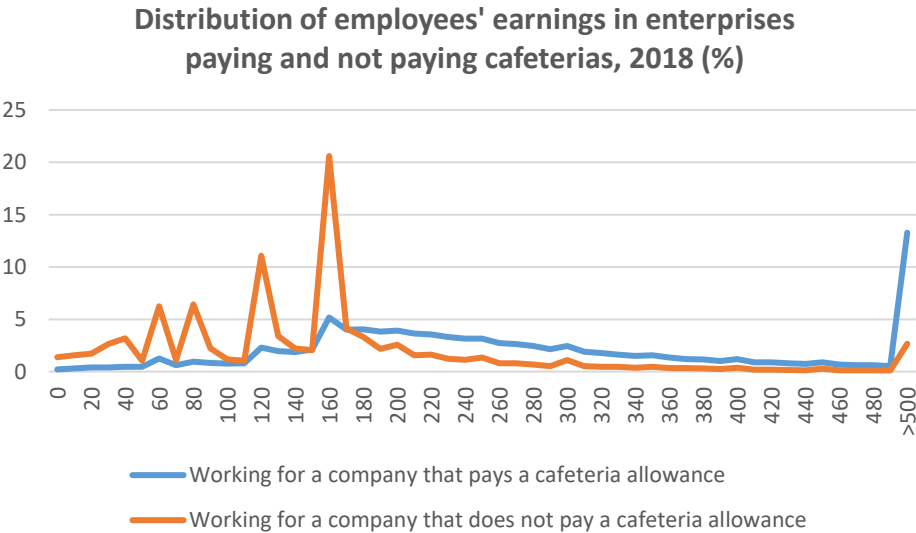
Source: NTCA, calculation of the Ministry of Finance

However, looking at the individual groups, it can already be seen that while the share of unskilled and young people fell in the higher income quintiles, the share of over-55s fell in almost similar proportions in all five income bands. Moreover, the allowance was least effective in terms of employment among the elderly.

The figure on the right shows the distributional effects after the restructuring of the allowance system for those eligible for the allowance for new entrants into the labour market. It can be seen that the share of those eligible did not change significantly in the lower income band, while it decreased in the upper ones, thus improving the targeting of the allowance system. The allowance for entrants into the labour market is mainly targeted at those in the lower income brackets and includes a significant share of young people, career starters or not yet continuously employed workers.

While the established system organised employment-related allowances in the burdens on employers, family-related allowances became available in the burdens on employees. In line with the government’s family-friendly policy, the range of allowances has been steadily expanding. Thus, the **government introduced a generous family tax benefit scheme in parallel with the single-rate tax system**. From 2014, the remaining amount became available from contributions for those who could not fully use the allowance. From 2015, the first marriage tax allowance was introduced, and the amount of the allowance for 2 children doubled between 2016 and 2019. From 2020, mothers with at least four children were exempted from personal income tax for life. From 1 January 2022, the government extended the scope of those eligible for the tax exemption to include people under the age of 25.

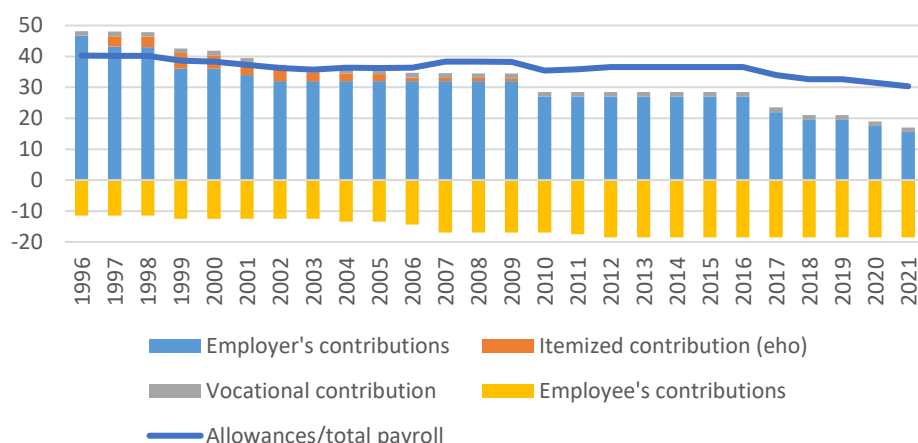
With the exception of employment and family policy allowances, tax policy has sought to review the justification for allowances and improve their targeting in order to broaden the tax base and simplify the tax system. Thus, with the introduction of the single-rate tax, most of the minor personal income tax allowances were phased out. The targeting of cafeteria benefits has also been significantly improved. Such benefits are mainly provided to better paid employees in larger companies, while in the SME sector they are less frequent due to the significant administrative burden. The preservation of the scheme is therefore only justified on the grounds of its consumption-orienting effect, insofar as it contributes to the recovery of the domestic economy. In this context, it is therefore justified to maintain only a tax advantage that is sufficient to trigger the desired consumption-orienting effect but does not result in a significant income redistribution in favour of the beneficiaries. In addition, the consumption-orienting effect of the benefits has been significantly weakened by the fact that the scope of such benefits was considerably extended in the past. Therefore, during the 2010s, the scope of the cafeteria benefits was gradually narrowed down to those available on the SzRC card, while their tax advantage relative to wages was also significantly reduced.



Source: NTCA, calculation of the Ministry of Finance

The overall level of taxes on labour income also gradually declined over the decade. The super-grossing of the tax base was phased out in two stages, and from 2016 the personal income tax rate was reduced by 1 percentage point to 15 percent.

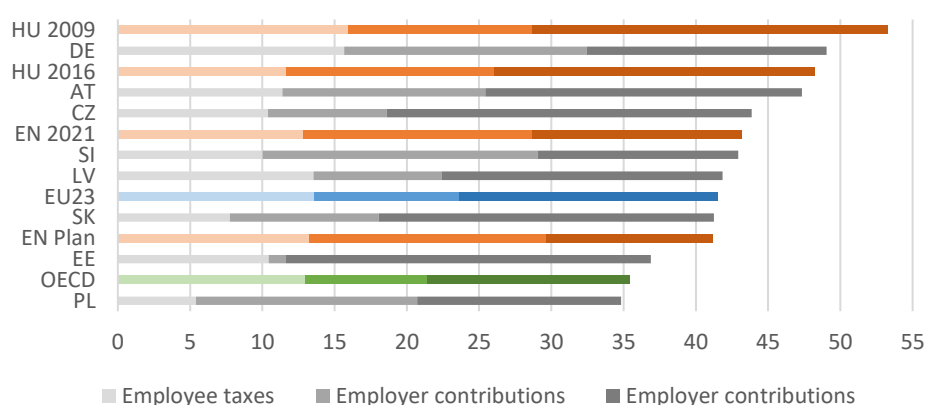
Social security contributions reducing gross pay and added to pay on 1 January (%)



Source: Taxing Wages, MoF

While in previous decades social security contributions tended to be gradually shifted from employers to employees, from 2017 onwards the possibility finally opened to reduce them substantially. Under the agreement between the government and the competition sector concluded at the end of 2016, the **burdens on employers reduced in six steps, from the previous 28.5 percent to a total of 15.5 percentage points**. The agreement made the reduction of the tax burden on employers conditional on a wage raise: thus the first two steps were accompanied by a significant increase in the minimum wage and the minimum guaranteed wage, while the next steps can be taken after each further increase in real wages of 6 percent. By the beginning of 2021, the first 4 steps of the agreement were completed, so the previously high Hungarian tax wedge is now lower than the similar indicators in Austria and the Czech Republic. Once the remaining steps are implemented, the Hungarian tax wedge could be reduced to a competitive level compared to other countries in the region.

Expected evolution of the tax wedge under the six-step wage agreement (%)



Source: Taxing Wages, calculation of the Ministry of Finance

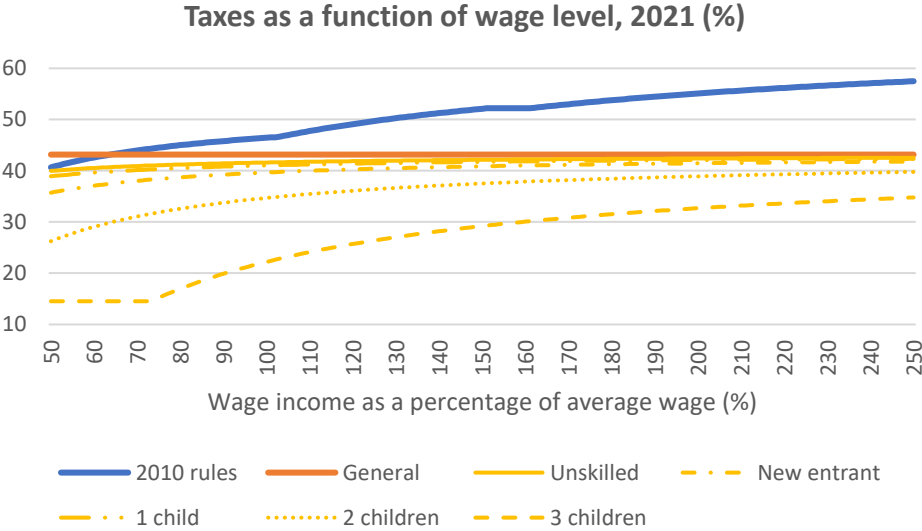
Tax policy also sought to simplify the tax system. Employer contributions were by a single social contribution tax from 2012, with health contributions merged in 2019 and vocational training contributions expected in 2022. From 2020, employee contributions were merged as well. The number of percentage taxes and contributions on the income of private individuals was thus reduced from 11 in 2010 to 3. The mergers were accompanied by a unification of tax bases, which significantly improved

transparency; it also created the possibility to harmonise the technical details of the various allowances. From 2021, building on the previous flat-rate tax system, the taxation of primary producers was restructured and made significantly simpler by making it more attractive, and similar changes are expected for the flat-rate taxation of self-employed private entrepreneurs in 2022.

3.2.3 Snapshot: restructuring has mostly been completed, tax cuts and simplification are still ongoing

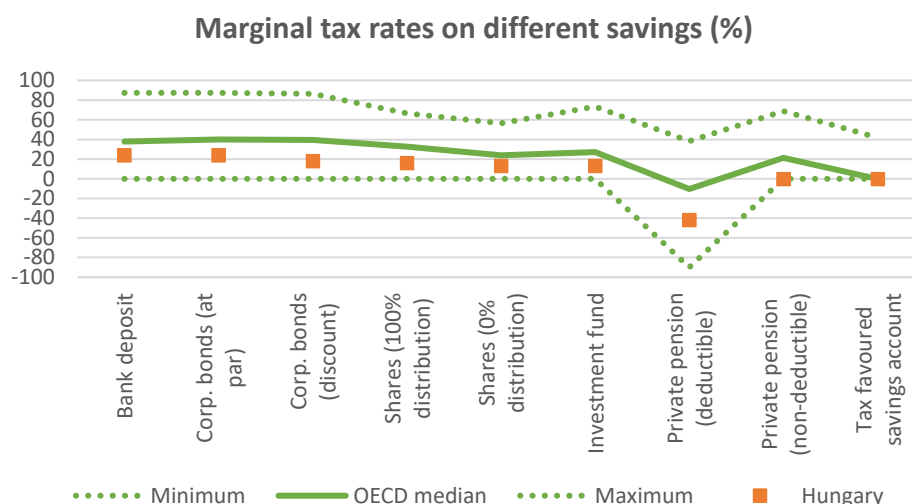
As a result of the restructuring and the series of tax cuts, the taxation of labour income has become more competitive, with practically all groups in a better position than under the 2010 tax and contribution rules. At the same time, the reduction in the tax burden is particularly marked for some target groups – these include families raising children, the middle class living mainly on earned income and employees belonging to the most vulnerable target groups.

Over the coming years, the implementation of the remaining steps of the six-step wage agreement should further reduce the general tax burden on labour, while the introduction of the exemption for workers under 25 of the personal income tax will further expand the allowance system for family policy and young people starting work; at the same time, further simplification of the tax system is a priority.



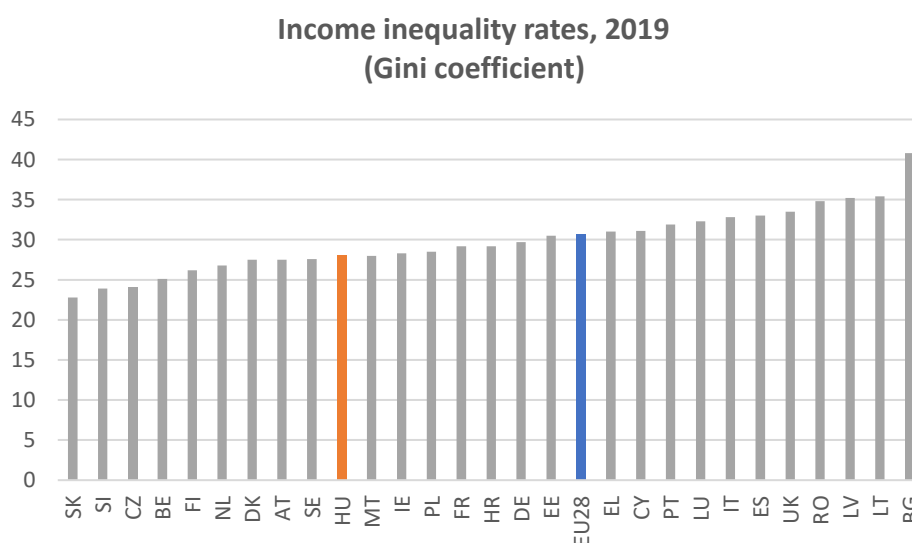
Source: Taxing Wages, calculation of the Ministry of Finance

Capital income is already competitive with the introduction of the single-rate tax, but this can be further improved by continuing simplification and improving the harmony of regulation.



Source: OECD (2018)

The results of the economic policy promoting employment are also justified by employment data: the participation rate of the population aged 15-64 has caught up with the EU average, while the employment rate has risen from 55% in 2009 to just above 70%, slightly above the reference value (see box on developments in the macroeconomic environment). Meanwhile, income inequalities have not increased significantly. The Gini coefficient used to measure this remains well below the EU average.



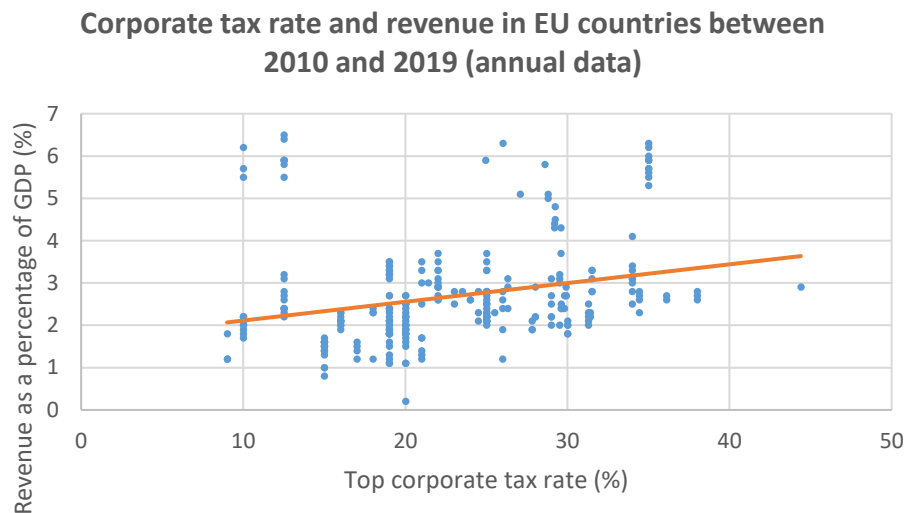
Source: Eurostat

4. Corporate taxation and international taxation

4.1 Theory: the tax most influencing investment decisions

Of the classical tax categories, the corporate profit tax base gives the strongest response to tax rates and various incentives. This is due to the high domestic flexibility and international mobility of investments and tax bases. The available estimates of the long-term Laffer curve for corporate profit taxes are therefore relatively flat, i.e., in the long run, the overall effect of a rate increase, taking into

account revenues from other tax categories, is relatively small in terms of additional revenue or outright revenue loss.¹¹



Source: Eurostat, Taxation trends

However, not only does a higher corporate tax rate not automatically generate significant additional revenue, if we take the negative behavioural effects on other tax brackets as well. Corporate tax revenues themselves show a relatively weak relationship with tax revenues, i.e. a higher nominal tax rate does not typically translate into proportionally more tax revenue. This is because, in addition to the Laffer curve effect mentioned above, revenues are strongly influenced by detailed rules in this case as well.

Profit taxes hamper productivity growth mainly by restraining investment, since, unlike consumption taxes, they repeatedly tax the returns generated by the investment of taxed income. As a result, the **tax burden on current consumption is lower than the tax burden on future consumption, which distorts consumption/saving decisions** (see box on reducing distortions from profit taxes).

In addition to the negative impact on investment decisions, **further distortions can be found in the internationally prevailing model of corporate profit taxes.**

Thus, a major complication in terms of regulation is that there are many uncertainties when valuing a company's assets. Therefore, a realistic valuation can only be ensured with sufficient flexibility in the accounting rules, which at the same time leads to tax optimisation opportunities; **consequently, corporate tax rules are typically distinct from accounting rules.** Another difficulty is that different countries define the tax base in significantly different ways, which can give rise to **both double taxation and double non-taxation problems.**

Another problem is that **corporate taxes are typically not neutral with respect to the resource structure of companies, even though there is no economic justification** for taxing companies with different resource structures differently. While the full returns on equity-financed activity is taxable, in the case of debt financing, interest expenditures are deductible. This gives companies a strong incentive to borrow, while the lender can obtain a more favourable tax treatment on the interest received than the borrowing company. This can ultimately reduce the tax burden at the level of the economy as a whole. On the other hand, as financial systems have evolved, partly in response to the

¹¹ Mendoza-Tesar-Zhang (2014), Trabandt-Uhlig (2010, 2012), Holger-Timo (2010), Dwenger-Steiner (2012), Gruber-Rauh (2007), Oudheusden (2010), Riedl-Rocha-Akis (2012)

characteristics of corporate taxes, the boundaries between forms of financing have also become blurred. As **so-called hybrid mismatch positioned between equity- and debt-type financing** are often treated differently in different countries, these differences also **create significant international tax optimisation opportunities**.

Another disadvantage is that in practice, **corporate tax rules typically do not take inflation into account**, and the tax base is based on the nominal profits of the company. Thus, **a company that is loss-making in real terms may be liable to pay corporate tax**, and in a higher inflationary environment the tax liability of companies (also in real terms) increases. Further complicating the matters is the fact that in many cases there is no need to revalue existing assets in line with price increases, which also creates distortions in the system.

For traditional corporate taxes, the **depreciation that can be applied to each cost item is also important. Ideally, the depreciable amount would be exactly equal to the reduction in the asset's real value, but this is impracticable** as it would require the definition of depreciation rules for each company and cost item.

4.1.1.1 Box: solutions to reduce distortions caused by profit taxes

The taxation of profits primarily distorts investment decisions, since these taxes – unlike consumption taxes – repeatedly tax the returns generated by the investment of taxed income. In present terms, therefore, the tax burden on current consumption is lower than the one on income invested for future consumption. To reduce distortions, the literature offers a number of possible solutions.¹²

Allowance for Corporate Equity

One possible solution is the so-called “Allowance for Corporate Equity” (ACE), where the invested corporate tax base is reduced by a nominal “normal” return. According to the approach, returns in excess of this amount arise from market imperfections and economic rents, so that although they are formally capital income, they can be seen from an economic point of view as income earned primarily rather than as the “price” of capital invested. In recent years, ACE schemes have tended to be on the decline, with Belgium, Italy and Portugal among the EU Member States having some form of ACE in force in 2020.

The advantage of ACE is that it makes the company interested in increasing the capital invested – and thus the investment. A further advantage is that, since the solution exempts a return (with a similar size to that of interests) in the case of equity from tax, it eliminates the so-called “interest shield” phenomenon (whereby interest paid reduces the corporate tax base, companies tend to shift their financing from equity to borrowing).

Another positive feature of ACE is that it does not require a fundamental overhaul of corporate taxes, making it relatively easy to implement. However, it has the disadvantage that in order to properly determine the “normal” rate of returns, the individual discount rate of investors would need to be known. In practice, therefore, it is usually proposed to approximate the “normal” rate of return by a uniform rate of return, which simplifies the determination of the discount rate. However, this is disadvantageous for investors taking higher risks, who can obtain a higher return in the case of a profit, but cannot benefit from the discount in the case of a loss, and are therefore worse off in terms of expected value. A further disadvantage is that this approach still requires an accrual-based approach to company profits and therefore does not represent a simplification of regulation and a reduction in administrative burdens.

¹² e.g. Mirrlees et al. (2011)

Cash-flow taxation

The cash flow approach to profit taxation defines the tax base simply as the difference between income and expenditure. Thus, all expenditure is immediately deductible as an expense, i.e. investments are immediately deductible from the tax base. (Under the corporate tax system, their cost can only be recovered over a number of years in the form of amortisation.) Therefore, a new company starts paying tax only after the initial investment has been recouped, and the profits reinvested in the development of the company reduce the tax base, thus avoiding the accumulation of tax mentioned above. An additional advantage is that the determination of the cash flow result eliminates the need to value existing assets, thus providing a significant simplification.

Since this approach distinguishes between income on the basis of how it is used – i.e. whether it is invested or withdrawn from the company and (presumably) consumed – it is in many ways an approximation to consumption taxes.

There are three different approaches to the tax in the literature:

Real (R) base: the tax base is simply the difference between sales and payments for purchases and wages.

Real+Financial (R+F) base: the above tax base is complemented by the cash flows related to financial activities. Interestingly, in its pure form, borrowing increases the tax base, while repayment reduces it.

Shareholder base: the tax base is based on the financial flows between the company and its shareholder (dividends, involvement of capital). The main difference from the R+F base is that liquid assets not withdrawn from the enterprise but not reinvested for purchase do not increase the tax base. (Here the state is basically a dormant partner, financing the start-up of the business and sharing in its profits.)

In Hungary, this approach is followed by the small business tax, whose base currently stands close to a shareholder approach.

Taxation of distributed profits (Estonia, Latvia)

At the turn of the millennium, the Estonian government comprehensively restructured the tax system so that the profit tax only applies to distributed profits (dividends). The primary objective of the reform was to stimulate investment and (thereby) speed up economic growth. This solution is close to a shareholder-based cash tax, but with the important difference that capital involvement does not reduce the tax base. However, certain costs, such as ancillary services, gifts, donations, entertainment expenses and costs not related to the business activity remain taxable under the Estonian system.

Accelerated depreciation

Accelerated depreciation will also improve investment incentives with minor changes to the rules. The idea is that a higher amortisation rate (up to 100 percent) can be applied to certain assets in determining the tax base than in accounting, so that the asset can be written off against the corporate tax base at a faster rate.

This is the direction in which the United States of America has made significant progress. The tax reform, effective from 2018, introduced a very broad 100 percent depreciation deduction for investments, for a transitional period of 5 years. (Previously published plans also proposed further steps towards a real-based, destination-country cash flow approach to profit tax.)

The Hungarian corporate tax system provides a similar discount, mainly in the context of the development reserve. According to the legislation, no corporate tax is payable on the development reserve formed from profits if the company uses it for investment within 4 years. No depreciation can be applied to the investment in the future. This solution is thus particularly advantageous in that it provides not only for immediate depreciation, but also for early depreciation. The applicability of the rules was significantly enhanced by the fact that previous restrictions on the amount of the reserve were gradually phased out over the last few years.

Among the practical difficulties, international tax problems and the situation of small and medium-sized enterprises deserve particular attention.

Hungary's international tax role is necessarily affected by its status as a capital importer. Since a significant part of investment and development is financed by foreign capital, maintaining and increasing their level is essential to improve indicators of the real economy. In addition to weighing up the risks, investors base their decisions on their expectations of returns, which are heavily influenced by the taxes they have to pay. If investment returns are subject to high levels of taxes, the returns realised by the investor are reduced by the amount of taxes. This means that some Hungarian investments that promise lower returns or are riskier are not financed. In addition to the tax burden on capital income, the returns that can be realised on investment are also fundamentally influenced by the deductions that are made from working capital. Consequently, the level, timing and structure of taxation also matter for a country's competitiveness and ability to attract capital.

However, when designing the tax environment for businesses, it is not only the characteristics of the large corporate sector that need to be taken into account, as 97-98% of Hungarian businesses are small and medium-sized enterprises. In their case, a major problem is that tax compliance costs and administrative burdens are disproportionately high in relation to the volume of activity compared to larger enterprises. Increased compliance costs can have a negative impact on taxpayers' compliance and can reduce the potential for a business to grow. It is also true for Hungary that the administrative burden on small and medium-sized enterprises is significantly increased by the fact that they too have to comply with corporate tax rules designed primarily for large companies (provided they do not choose a different method of taxation). Whilst these rules may be important for large companies in terms of protecting the corporate tax base or for determining the tax base in a fair manner, for SMEs they can often be alien and do not represent a significant difference compared to a more straightforward tax base.

International experience shows that the reduction of the tax burden on smaller businesses is mostly achieved through lighter administrative rules (e.g. less frequent tax payments) or through targeted simplified tax categories. However, the design of simplified tax categories should take into account the different economic roles of certain groups of micro and small enterprises, in addition to reducing administrative burdens. Of course, it should not be the aim to create a separate tax form for each group with special needs, but on the other hand, a distinction should be made between the smallest micro-enterprises typically comprised of own-account workers and those which have several employees and strive for growth.

4.1.1.2 Box: the nature of international tax competition and Hungary's position

The tax environment is also an important consideration when it comes to the location of headquarters and manufacturing facilities for large international companies. Groups of companies look at their taxes at a group level and tailor their operations to maximise their overall returns. International taxation plays an important role in this, influencing the way in which taxing rights, and hence taxes payable, on individual incomes are distributed between countries.

For the main production and service functions of multinational groups, a country's tax system, while an important issue, is outranked by a number of important aspects, in particular the availability of skilled labour and infrastructure, the level of wages, or even the configuration of the supplier network. For such functions, the tax burden on a company is a primary determining factor as to which country within a given region the company should invest in. **In this respect, we are primarily competing with the countries in our region with similar levels of development.** For these functions, the level of corporate tax is not necessarily the decisive factor. The level of taxes and contributions on labour income is at least as important, as only a small part of the profits from these functions will be taxed in Hungary, as the largest share of it will be accumulated at headquarters or in the centres of financing and intellectual property. It should be noted, however, that international rule changes in recent years have tended to link profits and real economic activity ever more closely, which may increase the importance of profit taxes in the choice of location.

The situation is quite different with regard to the location of the headquarters and some of the auxiliary functions of the business (in particular financing, royalty management). As these functions can often be performed by a small and mobile workforce, but a significant part of the group's profits is concentrated in these functions, so the system of tax rules is much more decisive. In addition, of course, other criteria may be important for the individual functions, in particular for headquarters, such as soft criteria such as general living standards, accessibility by air, or the number of English-language private schools. **In these areas,** given the mobility of the workforce and the functions they perform, **we are competing** not with the countries of the region **in the first place,** but with the whole developed world, including **Switzerland, Luxembourg, Malta, Ireland and the Netherlands.**

In the area of international investment and tax planning, there is a high number of intra-group transactions and a steady increase in their volume. For these, the determination of the arm's length price, the so-called transfer pricing, is of paramount importance in these cases and poses significant professional challenges for companies and public authorities. **In order to improve international competitiveness and protect their tax base, countries are gradually developing their international tax and transfer pricing capacities,** which pose progressive challenges both on the legislative and the control side. Given that transfer pricing disputes ultimately confront two states and involve direct budgetary revenues, all states are striving to have adequate professional resources in this area.

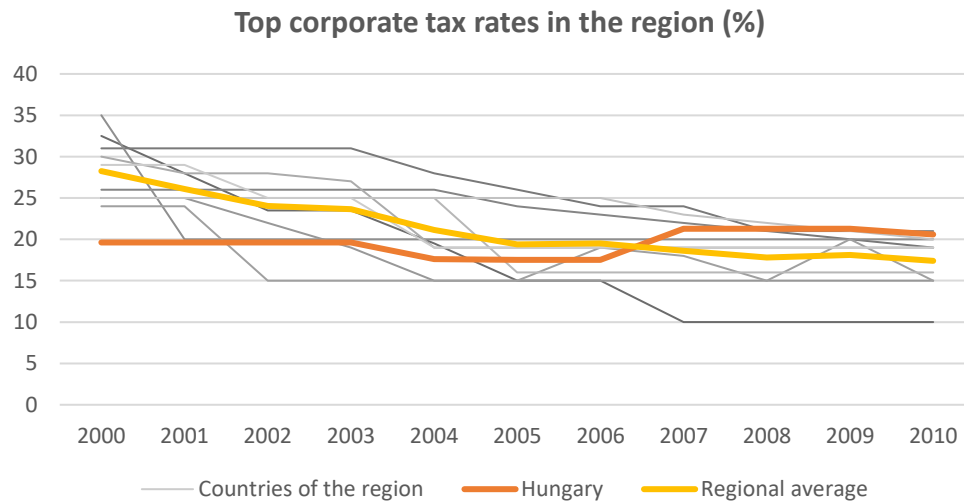
While complying with the text of the legislation, multinational companies often set up structures that lack real economic activity and are solely directed at achieving a tax advantage. In contrast, the OECD has taken action through the base erosion and profit shifting (BEPS) project and the European Union has used its results to take action through the Anti Tax Avoidance Directive (ATAD). In addition, the OECD is currently working on an **international minimum tax regulation** as part of its package of proposals to reform the taxation of the digital economy, which would no longer only take action against artificial profit shifting but would also cover profits made at the place of real economic activity, thus limiting competition for real investment.

These new developments represent both risks and opportunities for Hungary at the same time. In our country, investors are expected to carry out real economic activity in Hungary and take part in the payment of public dues. Thus, as long as the measures primarily affect structures without real economic activity to a greater extent, Hungarian investors should not fear the risk of BEPS if the appropriate regulations are adopted. In the meantime, the reduction of fictitious schemes could strengthen the link between the location of profits and real economic activity. This could increase the role of tax factors in the choice of location, from which a capital importer country with a competitive tax system could benefit significantly. However, restrictions on the taxation of locally generated profits may also have a negative impact on the competitiveness of capital importer countries such as Hungary.

4.2 Developments in the 2010s

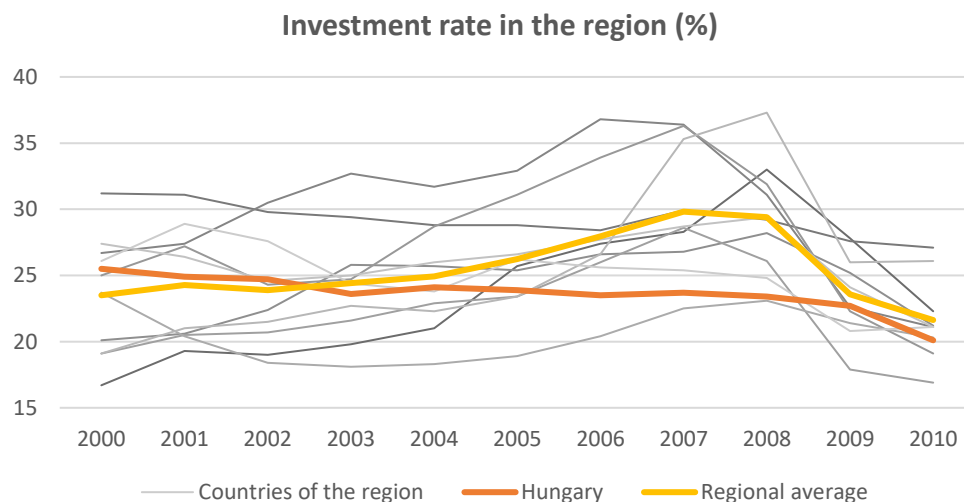
4.2.1 Initial situation: evaporating competitiveness

In the period before the 2008 crisis, as in the case of personal income tax, there was a significant relative decline in position in corporate tax rates. While in the early 2000s the corporate tax rate of 18% was the lowest in the region, in 2008 the rate of 16+4% was among the highest. The situation was further aggravated by the fact that in Hungary, in addition to corporate tax, companies are also subject to local business tax, which in many cases is a higher burden than the former, and the overall burden on companies was therefore already considered to be extremely high.



Source: Taxation trends

Among other factors, the deterioration in the competitiveness of the tax system may have contributed to Hungary missing out on the growth and investment boom that preceded the crisis.

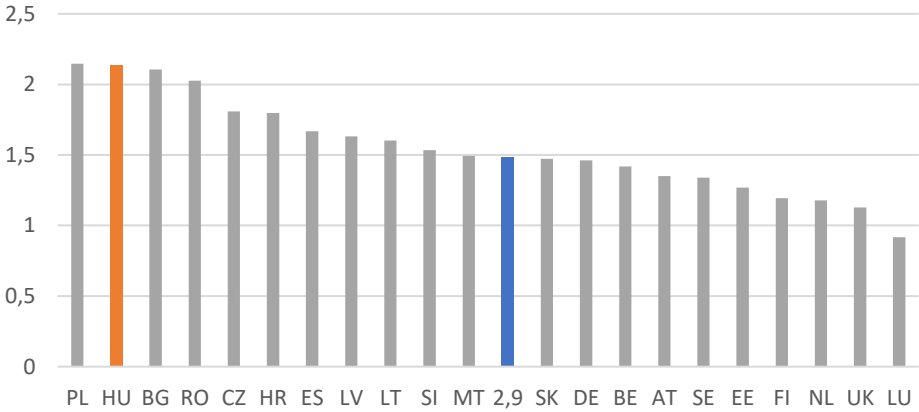


Source: Taxation trends

Another major long-standing problem of the Hungarian economy is the strong duality of the economy. While in the vast majority of countries, the productivity of large companies (largely foreign-owned) exceeds that of the (typically domestically-owned) SME sector, the gap is among the highest in Hungary. The tax system has also played a role in this situation, in addition to the legacy of the political systems change, in particular the privatisation model chosen in the 1990s, as high tax rates and tax avoidance have given a greater competitive advantage. On the one hand, this made the selection of

more efficient businesses more difficult and, on the other hand, it also discouraged businesses that were involved in tax avoidance from growth, as larger businesses could more easily be targeted by the tax authority.

Productivity advantage of the large business sector compared to SMEs, 2011 (or closest year)



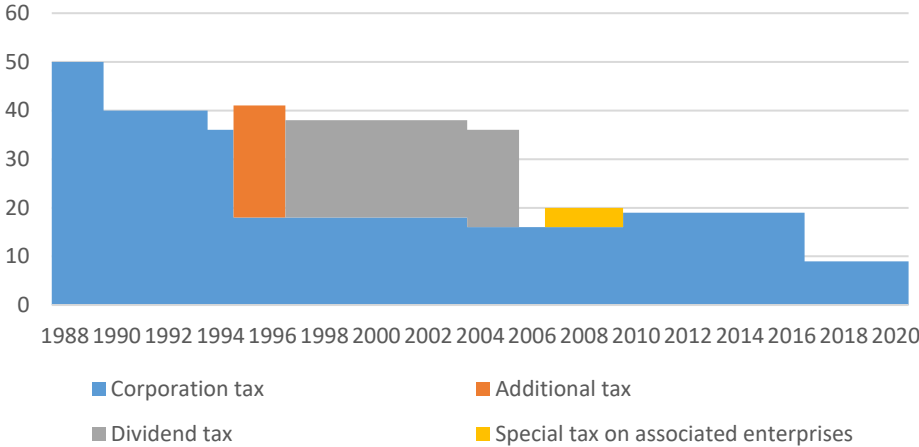
Source: Eurostat SBS survey, calculation of the Ministry of Finance

To help SMEs, a new simplified tax category, the simplified entrepreneurial tax (EVA) was introduced in 2003. Although the EVA was indeed a significant simplification for a group of taxpayers and gained considerable popularity, an important drawback was that it was initially introduced at an extremely low rate, which created the potential for significant abuse. In addition, it was only an attractive alternative for businesses that could not incur significant costs, and had e.g. no employees or significant investments. This system of conditions thus effectively excluded businesses with the potential to grow and was advantageous mainly for the “forced entrepreneurs” in the intellectual professions.

4.2.2 Directions and reforms: back in the vanguard

In the above initial situation, Hungarian tax policy in the 2010s also focused on increasing competitiveness in the area of corporate taxes, with a particular focus on SMEs and the export sector, which is of particular importance for growth.

Top tax rate on profits and dividends (%)



Source: MoF

This was achieved above all by reducing the corporate tax rate. As one of the first measures taken in 2010, the corporate tax rate was reduced to 10 per cent from the middle of the year for companies up to a HUF 500 million limit, while the 19 per cent tax rate was maintained for the part of profits above this threshold. In the long term, however, the economic policy leadership committed itself to a unification of the rate from that time onwards, which was finally introduced in 2017, when the tax rate was reduced to 9%, the lowest rate among EU member states.

In addition to the reduction in tax rates, a conceptual shift in the structure of the tax was the gradual move towards a cash-based taxation based on ownership (see the box on the reduction of distortions caused by profit taxes in the introduction). This was achieved through the institution of a development reserve. In this context, the profits retained for development are exempt from tax: the reserve set aside is tax-free and then, when the reserve is used, if it is realised within 4 years, the rebate essentially becomes an accelerated depreciation. Although this asset had existed in the tax system since 2003, from 2019 its limits were significantly relaxed: its ceiling was raised from HUF 500 million to HUF 10 billion, and then abolished from 2021, and the restriction that the amount of the reserve made cannot exceed half of the profit for the year was lifted.

While in the first half of the period, the fiscal situation, in addition to the rate cuts, also required measures to protect the tax base (such as the tightening of the limits for carry-forward of losses), in the second half of the period, significant steps were taken to make the tax structure more competitive, including through measures to stimulate investment. The introduction of group taxation in 2019 was thus a major change. Investment was also stimulated by the relaxation of the development tax benefit, which has substantially eased restrictions on the minimum value of investment and on employment growth. In addition, the abolition of the year-end tax pre-payment (“tax top-up”), which was introduced from 2019 for central taxes and from 2020 for the local business tax, was a significant administrative and liquidity facilitation.

From the perspective of corporate taxation, the changes in the international tax environment cannot be ignored, either. In 2013, the OECD’s Base erosion and profit shifting (BEPS) project was launched and was aimed at mapping out and neutralising channels for corporate tax planning. EU Directives (ATAD I-II) and a Multilateral Convention (MLC), to which Hungary is a signatory, were adopted to implement some of the proposed measures. The rapid development of standards for the exchange of tax information, which no longer allows information to be withheld on the grounds of banking secrecy and which also requires information on beneficial owners to be made accessible, also helped to detect abuse. The automatic exchange of information (e.g. on bank account balances, conditional tax assessments and advance pricing rulings, country-by-country profit and loss accounts of multinational companies, cross-border tax planning schemes and internet platform activities) was significantly enhanced and the need for proper recording of data on beneficial owners became necessary. Also noteworthy is the adoption of OECD recommendations and an EU directive to improve the efficiency of tax dispute resolution, which increases the predictability of the tax environment and is therefore a positive development from the point of view of competitiveness. The further expansion of our already extensive network of conventions (mainly among Middle Eastern countries) and the renegotiation of some old conventions were meant to enhance Hungary’s competitiveness: we now have double taxation conventions with 82 countries.

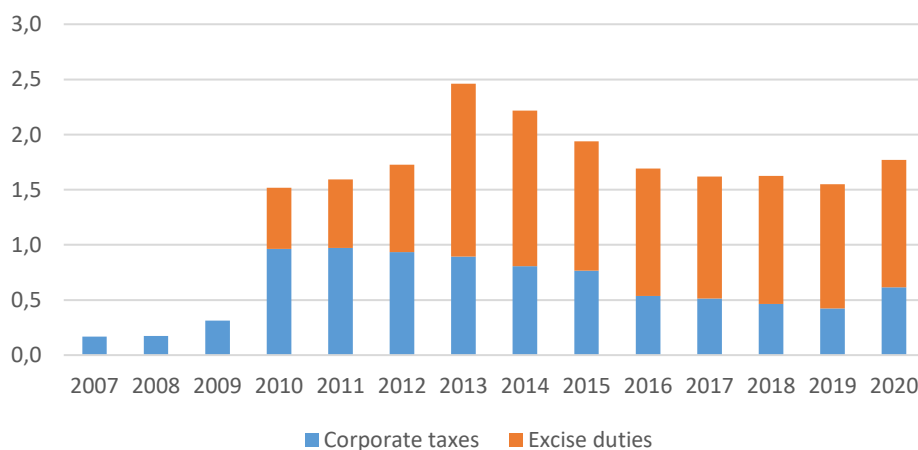
The Hungarian tax treaty network and the 2010s negotiated or renegotiated conventions



Source: MoF

The budgetary situation at the beginning of the period also made the introduction of new special taxes necessary. These were levied on service sectors dominated by large companies operating exclusively in the domestic market, where the substantial profits generated, partly due to the oligopolistic nature of competition, allowed the payment of the additional tax, leaving the SME and export sectors untouched. Over the decade, however, the role of these special taxes has gradually declined and their structure has also become more advantageous: the initial corporate taxes were gradually replaced by sales taxes, which are less harmful to investment and thus to growth. Of the remaining special taxes, due to their structure, the bank tax, the income tax on energy suppliers and the utilities tax cannot be considered consumption taxes, but their weight has also declined over the years, partly as a result of the rate reductions and the rebates introduced.

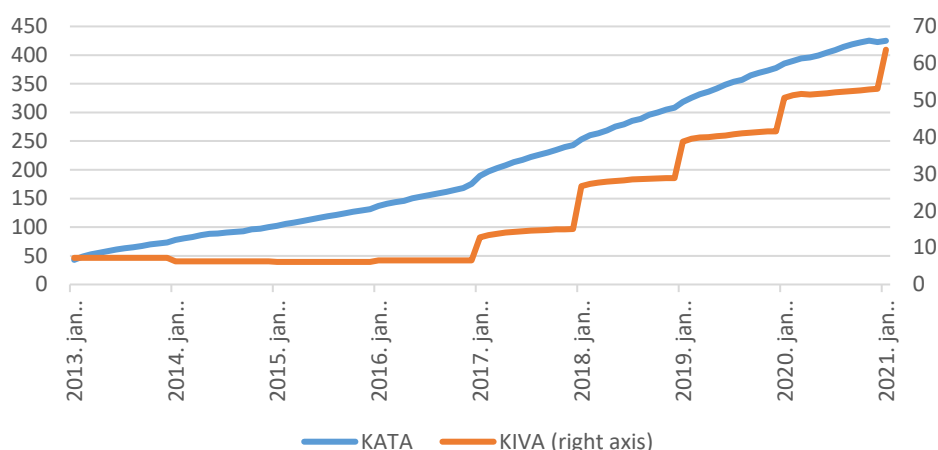
Sector specific tax revenue as a share of GDP (%)



Source: MoF, NTCA

Two new simplified tax types were introduced for small and medium-sized enterprises: the flat rate tax of small taxpayers (KATA) and the small business tax (KIVA), while the EVA was gradually phased out. The number of businesses opting for these new tax categories gradually increased following their introduction, with almost half a million businesses now using them.

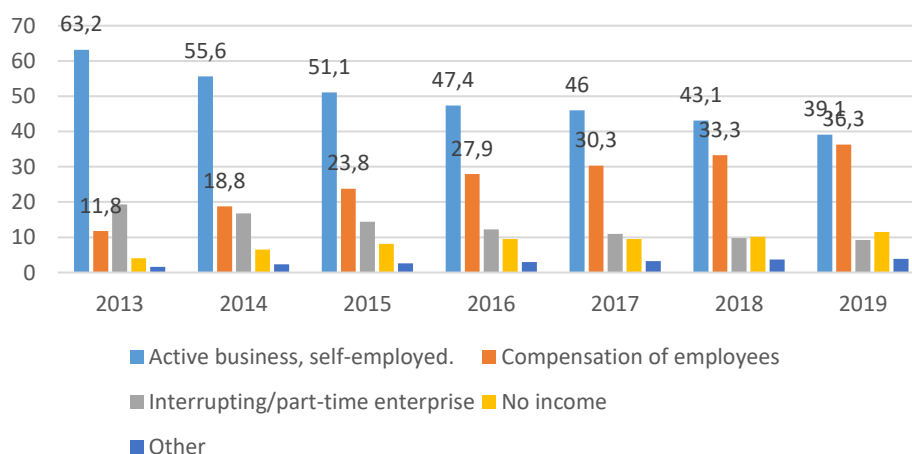
Number of KATA and KIVA subjects (thousands)



Source: NTCA

The KATA is a lump-sum tax whose main target group is the self-employed own-account workers who sell to the general public. The tax has the advantage of a low tax burden and its extraordinary simplicity, which also allowed the main target group to substantially whiten its activities. The popularity of the KATA grew dynamically since its introduction, exceeding 400,000 by the beginning of 2021. By the end of the decade, however, the growing proportion of people other than the original target group opting for this form of taxation became a growing problem: by then, more than a third of those who had opted for the tax category came from an employment relationship. Therefore, from 2021, a new regulation was introduced, with a 40% payer tax rate for payments above HUF 3 million from a single payer. The aim of the change is to bring the tax burden on larger single-payer payments closer to the tax burden on wages, while the original target group of the KATA is not affected at all.

Composition of KATA subjects by preventive activity (%)



Source: NTCA

The KIVA is a cash-flow-based tax category designed for larger businesses with employees, and was designed with a particular focus on helping small businesses to grow. However, the tax base was too different from that of the corporate tax system, which made the transition much more difficult and in many cases discouraged accountants from recommending this tax category to their clients, so that initially only a few taxpayers decided to opt for it. As of 2017, a major restructuring of the tax category became therefore necessary, but without affecting the main incentives (see the text on the structure of the KIVA and its restructuring in 2017 in the box). In addition, the number of businesses eligible to

opt for the tax category was extended in several steps, and the Ministry of Finance and the tax authority launched targeted information campaigns to help taxpayers who, on the basis of the available data, were likely to find the switch worthwhile. As a result, the number of taxpayers opting for the KIVA started to grow rapidly: By the beginning of 2021, around 65,000 businesses had already opted for this form of taxation. The significance of this figure is increased by the fact that the vast majority of these were from a much narrower group of businesses, those with employees (on the average, they had 5–7 employees in different years).

4.2.2.1 Box: the structure of the KIVA and its restructuring in 2017

The **small business tax**, introduced in 2013, **replaces corporate tax, social contribution tax and the vocational training contribution**. The tax is based on personnel costs and company profits, which are determined on a cash-flow basis (see box on reducing distortions caused by profit taxes). This tax category is thus **structured to favour fast-growing companies that reinvest their profits**. The tax rate is a flat rate between the labour tax rate and the corporate tax rate, which was 16% until 2017 and then steadily decreased in 2017 in line with the reductions in the corporate tax and social contribution tax rates, to 11% in 2021.

Despite its positive features, the tax was not widely adopted following its introduction. This was primarily because the R+F approach to the cash-based tax base introduced was very different from that of corporate tax, which made the transition to the tax very difficult and also made it difficult to compare the expected tax liability with that under conventional taxation. In addition, uncertainties about expected cash flows made it difficult to plan the tax liability.

From 2017, the tax base was therefore significantly modified. Instead of the previous tax base definition based on cash changes, the **small business tax** is now **based on dividends paid, from which capital gains are deductible** (i.e. the shareholder (S)-based tax base establishment was introduced instead of the R+F tax base). This resulted in a **much simpler transition to and return from the tax category**, as dividends are much closer to the concept of accounting profit, and the **tax base became more predictable**, as it is not affected by unexpected cash flows. The **number of tax base adjustment items was also significantly reduced** as a result of the restructuring, with the substantive part of the tax return being shortened from three to one page. At the same time, **the limits on choosing this tax category were relaxed**.

In addition to the above, a number of technical changes were introduced:

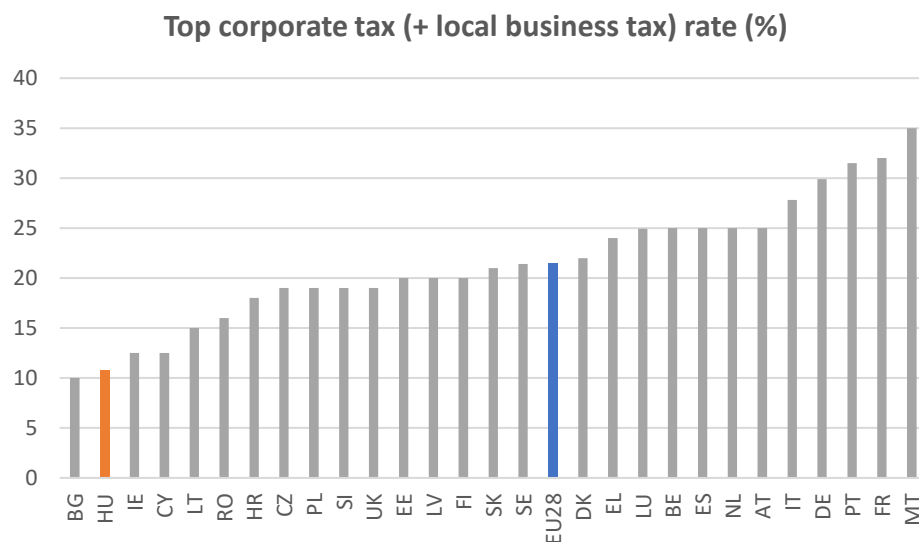
- The conditions for the carry-forward of losses was made more flexible, so that the resulting negative tax base can be used in later years without restriction.
- To the extent of the payments linked to the new investment, not only the accrued losses of previous years but also the loss-absorbing items of the current year (in particular capital involvement) are now deductible from the personal expenditures; the tax category thus provides an even greater incentive for investment. The amount of the reduction that can be taken advantage of is automatically calculated by the tax return form on the basis of the data provided.
- The number of tax base adjustment items was also reduced by the fact that the scope of unrecognised costs not incurred for the benefit of the company and which increase the tax base was brought into line with the scope of items already common in the Corporate Tax Act.
- It has also become easier to return under corporation tax. In this case, the unused profit reserve generated in the period under the KIVA and not used for investment is subject to the same rules as the development reserve, except that no interest is charged for deferring tax liability. Losses incurred during the period of small business tax liability may also be used in the corporate tax period. The advance tax for taxpayers is also reduced.

- To ensure that no small business taxpayer is adversely affected by the switchover, a tax base reduction item was introduced to ensure that small business taxpayers benefit from the new tax base definition, in practice retroactively as well. This item can be calculated on the basis of previous tax returns, and the amount of this item was communicated to small business taxpayers by the NTCA in 2017.
- To avoid misuse of the petty cash fund, if the value of the fund exceeds a certain level (the highest of the value of the fund at the time of the switchover, HUF 1 million or 5 percent of the income), the tax base must be increased by the additional increase. However, if the value of the fund subsequently decreases again, the tax base may be reduced as well.

As a result of the change of the tax category and the related promotional campaigns, **the number of firms opting for small business taxation increased by almost ten times by March 2021 compared to December 2016 and continues to rise**, clearly demonstrating the success of the change.

4.2.3 Snapshot: the position has improved, but must also be maintained

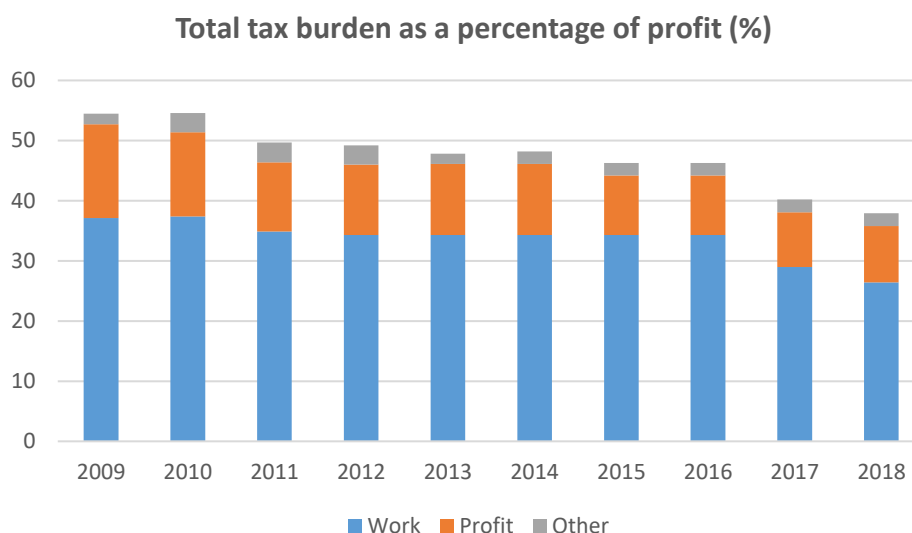
As a result of the reforms that have taken place over the decade, the Hungarian tax environment is once again competitive in terms of corporate taxation overall: the corporate tax rate is the lowest (the 2nd lowest when combined with the 2% HICP rate) among EU member states.



Source: Taxation trends

The significant improvement in the business tax environment is confirmed by the relevant sub-indices of the various competitiveness rankings. The Tax Foundation’s 2020 Tax Competitiveness Index ranks Hungary 4th best in both corporate and international taxation among the 36 OECD member states, while the German ZEW research institute ranks Hungary 2nd out of 21 developed countries in its 2020 tax sub-index.

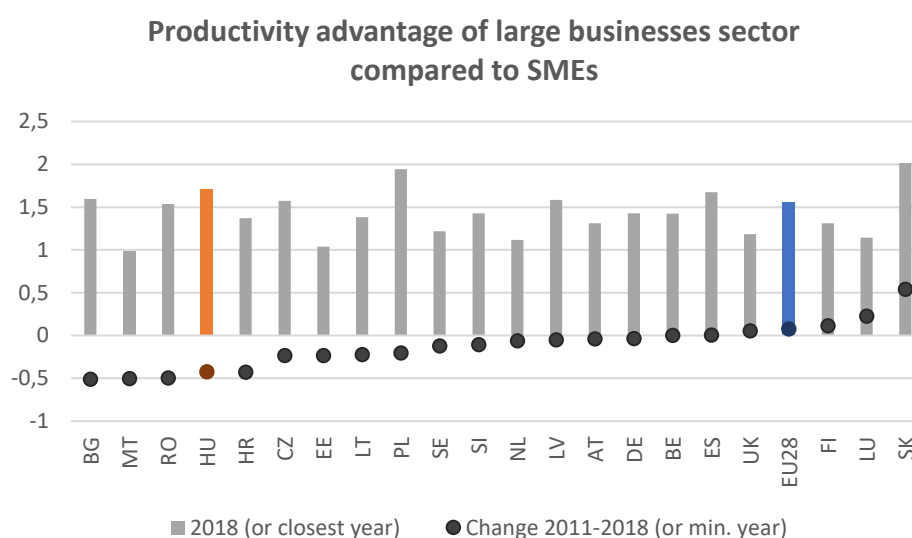
The tax competitiveness ranking for most countries (including the classic tax havens) is from the World Bank and PWC’s “Paying Taxes” publication, but unfortunately it does not include a specific indicator on corporate taxation. However, the composite ranking places Hungary 56th out of 189 countries surveyed in 2020, which is much better than the 122nd position in 2010. For the sample company in the publication, the total tax burden paid by the company (including the employer burden on wages) fell from 54.5 to 37.9 percent of profits between 2009 and 2018.



Source: Paying Taxes

The economic policy measures taken to stimulate investment in the second half of the decade proved effective: by 2019, gross fixed capital formation exceeded 27% of the GDP, the highest in the region and the second highest in the EU after Ireland.

Some improvement could be achieved in the duality of the economy as well: with the gap between the productivity of SMEs and that of large companies narrowed to one of the smallest in the EU member states. This indicator is still high, however.



Source: Eurostat SBS survey, calculation of the Ministry of Finance

In the coming years, the main challenge for corporate taxation can be to adapt to the changing international tax environment. Of these, the OECD's draft global minimum tax rules could bring the biggest changes, which could significantly alter the incentives for international taxation. The details of the regulation are still being worked out, but in the negotiations Hungary has a fundamental interest in ensuring that it focuses primarily on techniques to counter artificial tax base reallocation, that it limits as little as possible competition for real investment and efforts to create a competitive, less distortive tax structure, and that it covers all corporate taxes (including local business tax). Significant changes are also expected in the allocation of international tax rights, especially for digital economy actors, where work is also underway in the OECD. At the same time, in addition to international tax

changes, proposals to further improve the competitiveness of the tax environment, in particular recently in relation to local business tax, have been on the tax policy agenda of decision-makers.

5. Taxes on consumption and harmful activities

5.1 Theory: the best taxes in terms of competitiveness

Shifting the focus of taxation within the tax system **towards sales taxes can help the economy grow**. These taxes also tend to reduce distorting effects on consumption and saving decisions, as they are levied on individuals' earnings once at a uniform rate regardless of the time elapsed between the acquisition and consumption of the income, unlike income taxes, which are levied on saved and reinvested income at a cumulative rate (see the chapter on corporate taxation). In addition, the shift in the centre of gravity of the tax system also favours active groups participating in production during the transition period, thereby encouraging entry into the labour market and production.

In addition to the above, an important advantage is that they are typically levied on the basis of the country of consumption rather than the country of production: i.e. a domestically produced and an imported product or service are taxed at the same VAT rate, while exported goods and services are taxed at the rates applied in the country of destination rather than domestically.

The general change in VAT rates and the extension or reduction of discounts will certainly have an impact on the income and consumption of economic operators. **A fundamental question is whether or not the change, e.g. the inclusion of a product range in a reduced rate, is reflected in consumer prices**. If so, it is primarily the behaviour and consumption patterns of consumers of the product that may change. If not, then the profitability of selling the product will change, which may ultimately be reflected in the profits of the owners and/or the income of the employees.

Which change, or what mix of changes, will occur may depend on a number of factors. Both Hungarian and foreign studies show that increases in prices tend to occur earlier and to a greater extent than reductions. Several studies suggest that products and services may behave differently: services (e.g. restaurants, hairdressers, etc.) are more likely to be affected by asymmetric price effects (i.e. where the increase is more pronounced), or competition in the product market may amplify the price effect.¹³ The price effect can also be influenced by the size and scope of the VAT change and even the timing of the announcement. An analysis of euro zone countries shows that general rate increases are almost fully reflected in prices, while changes in preferential rates and reclassifications are much less so.¹⁴ The impact on prices tends to be more pronounced the wider the range of products concerned and the more durable goods are included. The impact of a change in the general tax rate is already felt in the few months before the new rules come into force, especially for durable goods, while the impact of a change in reduced rates is less pronounced.

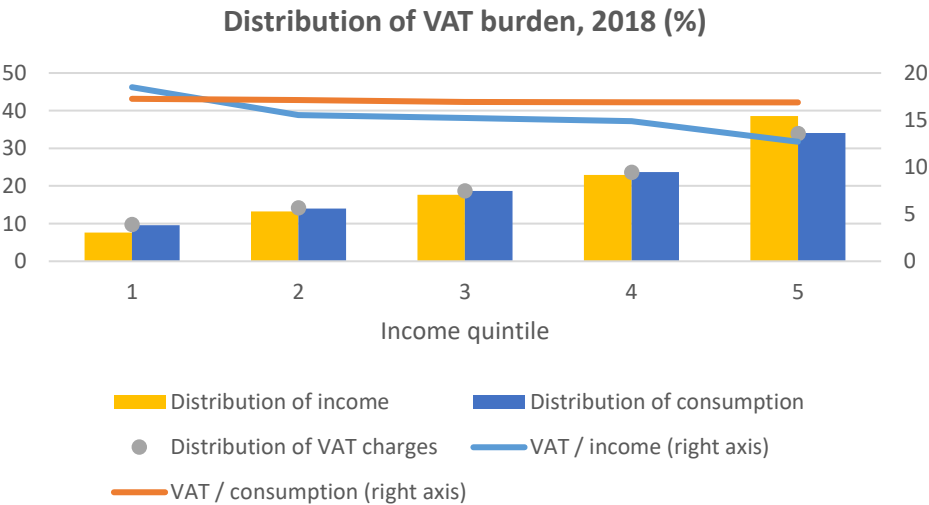
If VAT changes are reflected in prices, **demand responses** should also be reckoned with. Demand changes may vary by income group and product type. In addition to the change in the price of a given product, demand is also affected by how the prices of alternative products have changed, how changes in the VAT rate have shaped overall purchasing power, and how flexible the demand for a given product is in response to changes in income. Lessons from the international literature suggest that the own-price elasticity of food items is negative but low in absolute terms, which means that consumption decreases in response to price increases, but only moderately. Households are trying to keep food consumption levels stable regardless of price developments, which also means that rising food prices

¹³ Ván-Oláh (2018)

¹⁴ Benzarti et al. (2017), Benedek et. al. (2015)

reduce consumption of other product groups as well. The reason for this is the income effect: if consumers wish to maintain previous levels of food consumption even at higher prices, they simply have less money left to buy other product groups.

The distributional effects of a change in the VAT rate are easier to demonstrate. VAT is often accused of being a regressive tax category that hits the highest income households less, but this is not necessarily true. If we look at the tax burden focusing only on a given year, it is generally true that those in higher income deciles save a higher proportion of their income and thus pay proportionally less VAT. However, this is largely due to the fact that the one’s income may vary across different life stages, with many people spending the income they earn in the high-income life stages in their lower-income life stages (e.g. during a period of unemployment or retirement). Therefore, if the tax burden is examined as a proportion of total lifetime income or consumption rather than as a proportion of income in a given year, regressivity largely disappears.¹⁵



Source: Calculation of the Ministry of Finance based on HCSO HKÉF

However, the tax policy instruments available within the VAT framework, in particular reduced VAT rates, are of very limited use for social policy purposes. Even with appropriate targeting (i.e. reducing the VAT rate on a product that is consumed more by poorer households), higher income households are likely to enjoy higher discounts in aggregate from their higher consumption expenditure. Therefore, even if higher savings in relation to income or expenditure are achieved by the poorer groups, this type of redistribution is rather costly. VAT reductions specifically targeted at poor households (e.g. basic foodstuffs, water services) undoubtedly achieve the immediate objective, but their efficiency is very low due to the factors mentioned above. Although VAT changes can affect consumption patterns and thus specific social objectives through price changes, such VAT reductions are typically highly regressive. This is because the consumption of these goods and services (healthy food, culture-related goods and services, environmentally friendly, energy-saving products, etc.) is highly dependent on the individual’s income. Thus, typically, “consumption-orienting” support through VAT discounts tends to be concentrated in higher income groups who are less price sensitive and whose consumption is therefore less affected by price changes. Consequently, this form of support for social objectives is very inefficient. From a welfare point of view, a system without discounts, applying a uniform rate to all goods and services, is more advantageous – redistributive objectives can be more effectively achieved through targeted direct subsidies.

¹⁵ OECD/KIPF (2014), Thomas (2020)

VAT changes can also have **general economic effects**. Under certain conditions, targeted VAT reductions can theoretically improve productivity and increase labour market demand for (mostly low-skilled) workers. The extent of the changes will depend to a large extent on the labour intensity of the sector and the flexibility of the labour market, as well as on the labour supply-demand balance. The impact on output tends to be temporary in labour-intensive sectors and therefore the impact on employment is minimal.

The primary purpose of **environmental and health taxes** is generally not to raise tax revenues but to discourage harmful activities. Literature suggests that such taxes are more effective in achieving environmental objectives than direct regulation (bans, quotas). However, theoretical literature and recommendations from international organisations also suggest that there is considerable room for improving the environmental efficiency of these taxes and, to a lesser extent, for increasing their revenue-generating capacity. The latter provides an opportunity to reduce taxes that are more harmful to economic growth than taxes on income. In practice, however, there is often a problem of regulatory fragmentation and inconsistency, resulting in a significant divergence in the tax burden between two activities with similar polluting effect. Therefore, in addition to increasing tax rates, the tax burden should be aligned as much as possible directly with the level of harmful activity or pollution (e.g. CO₂ emissions).

However, the tax system is only one tool for enforcing environmental aspects, and based on the recommendations of international organisations and literature, green tax regulation should be treated as part of a complex environmental programme. Accordingly, countries that are leading in terms of environmental protection are formulating a complex green strategy with long-term objectives and priorities. The objectives most often include reducing pollution, creating a healthy environment and generally improving the quality of life of citizens. The instruments used to achieve this include green regulations (e.g. emission limits), bans, subsidies and other incentives, including green taxes. A common solution is not to introduce an environmental measure on its own but in a group, as the effects of individual measures can often be mutually reinforcing. An example is an environmental tax on energy for heating, the revenue from which can be used to set up a subsidy scheme to help improve the insulation of homes. It is also often argued that green taxes are less distortive of rational decisions by economic operators, and their introduction is often linked to a reduction in traditional taxes (e.g. on labour). Ideally, the aim of green taxes is precisely to internalise the (external) costs that are not perceived by economic agents but are borne by other agents, i.e. to make the agent who causes them pay for them.

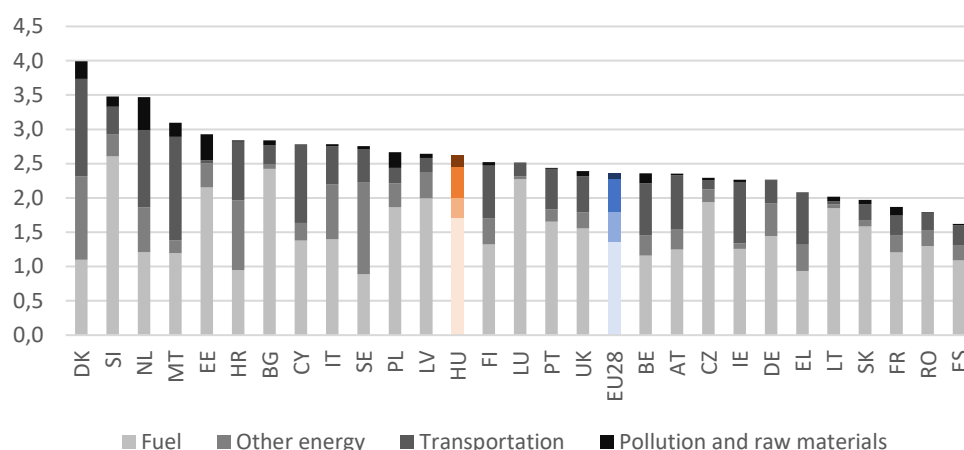
5.2 Developments in the 2010s

5.2.1 Initial situation: good starting position, uncertain directions

A significant constraint for the most important consumption taxes is that these tax categories are highly harmonised at EU level. Thus, EU rules determine, among many other factors, the number of VAT rates and, in some cases, their level, the range of products that can be subject to reduced rates and exempted or that are to be exempted, the minimum rate of excise duty to be levied on each product and the mechanisms for accounting for and collecting the tax.

The weight of consumption taxes in the tax mix was already high in the 2000s, as in other countries in the region (also due to the fact that international classifications classify local business taxes as belonging to this category). The weight of revenues from environmental taxes was also above the average for developed countries, but this is also typical of most less developed countries, also due to the higher weight of the volume of activities underlying such taxes in relation to the economy.

Environmental tax revenue as a share of GDP, 2009 (%)

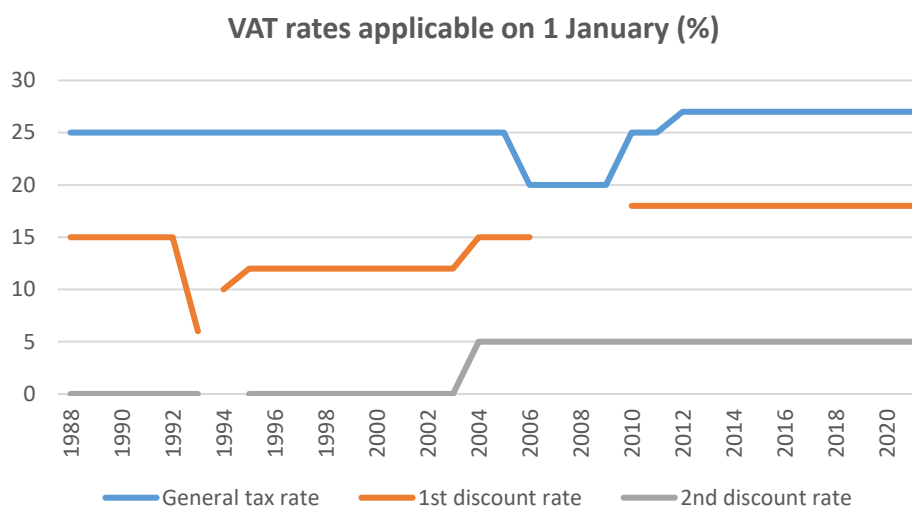


Source: Taxation trends

However, there is no clear trend as to the role intended for consumption taxes in the 2000s: tax policy tended to shift towards reducing their weight before the crisis, followed by a correction at the end of the decade. The most spectacular example of this was the reduction of the top rate of VAT to 20 percent at the beginning of 2006 and the abolition of the 15 percent middle tax rate, while in 2009 the top rate was increased again to 25 percent and a middle rate of 18 percent was reintroduced. This manoeuvre, however, created an opportunity to revise the range of products covered by the reduced rate, which had been significantly widened in previous years, so that the range of products and services covered by the reduced rate was significantly narrowed overall over the decade. The efficiency of collecting sales taxes, based on available estimates, was below that of developed countries, but not bad among the countries of the region.

5.2.2 Directions and reforms: protection of revenues

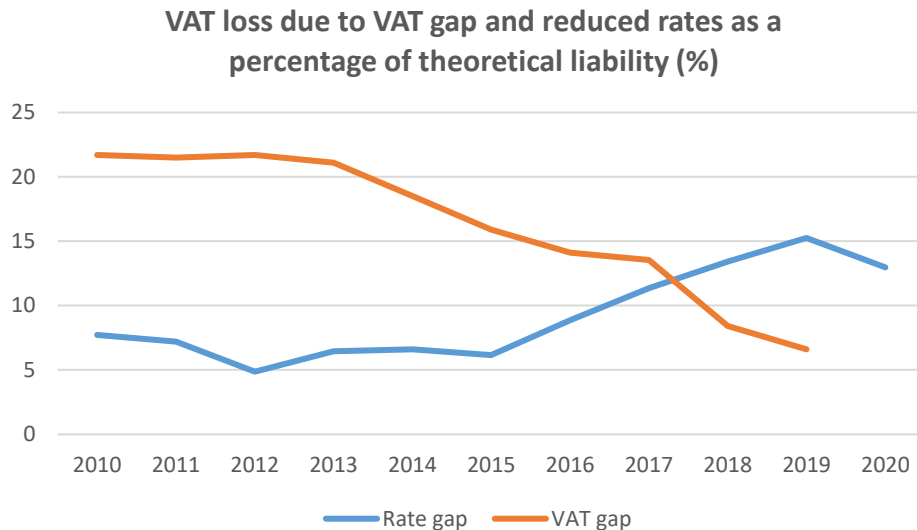
In the 2010s, tax policy sought to increase the weight of consumption and environmental taxes within the tax mix. As an important element of this, the standard VAT rate was increased to 27% from 2012, whereas the reduced rates remained unchanged. Subsequently, the VAT system stabilised in terms of the main tax rates, which means an unusual stability by historical standards despite changes in other detailed rules. Excise duty rates, which also serve health and environmental protection purposes, also increased, partly to comply with EU minima following the expiry of derogations granted upon accession to the EU.



Source: Taxation trends, MoF

In addition, the need for fiscal adjustment in the first half of the decade made it necessary to introduce several new taxes, essentially of a consumption nature, to offset the cuts in income taxes. Some of these were aimed at addressing certain harmful activities or other specific problems. These include the introduction of a public health product tax to reduce the consumption of foodstuffs that pose a health risk, and an advertising tax that also allows the taxation of large international digital companies. In addition, the sectoral special taxes introduced in the early phase of the crisis management to improve the balance of the budget were replaced by more growth-friendly tax categories and/or ones that are more in line with international practices, mainly of a consumption nature. In this spirit, a financial transaction tax was introduced, while a tax on insurance premiums in line with international practices was introduced in the insurance sector. The existence of these is partly justified by the fact that the activities of the financial sector are essentially exempt from VAT under EU rules. Also as a successor to the first generation of crisis induced taxes, the telecommunications tax and the retail special sales tax were introduced, which have a significant revenue-generating capacity compared to a sectoral-type tax, but as a broad-based consumption tax they have less negative impact on investment and development than a similar revenue-generating profit tax.

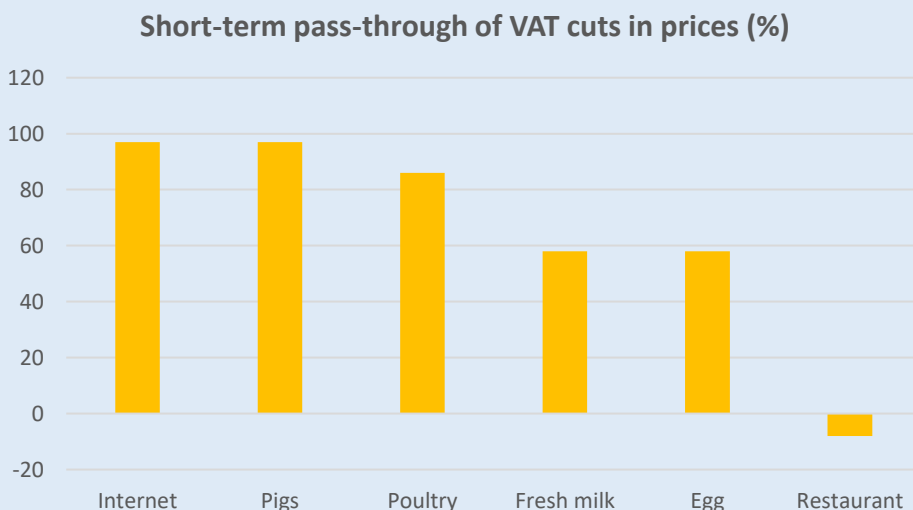
By the second half of the decade, however, tax policy had shifted from increasing tax liabilities to reducing the grey economy (see the chapter on tax administration and the grey economy). The budgetary room for manoeuvre created by economic growth and whitening measures during this period already allowed for targeted tax cuts in cases where circumstances made this most necessary. These include raising the limit for VAT exempt status (by substantive right) from HUF 6 million to HUF 8 million and then to HUF 12 million, introducing more favourable VAT rates for certain essential foodstuffs and other services, and introducing exemptions for retail financial transaction tax to encourage electronic payments.



Source: CASE, calculation of the Ministry of Finance

5.2.2.1 Box: targeted VAT reductions reflected in prices

Based on the results of the research conducted by the Ministry of Finance on the impact of VAT changes in 2016/17, with a particular focus on food VAT cuts, the bulk of the VAT cuts were reflected in the short-term in the consumer prices of pork, poultry, internet and milk. However, the VAT reduction of eggs had about half the impact on prices, while those of restaurants had no impact at all. Further results suggest that the price changes resulting from the 2016/17 VAT changes may have added 0.9% to the volume of food consumption. Measures implemented up to 2017 proved to be well targeted from a redistributive perspective compared to 2010; selective cuts benefited lower income groups more in proportion to expenditure. However, the data available from the survey did not indicate a significant whitening of the market or a significant strengthening of domestic producers' market positions for the product groups concerned. The previously estimated loss of revenues in the context of the 2016 VAT reduction for pork was broadly confirmed by the available NTCA data, so there was no significant whitening or increase in consumption to mitigate the loss.



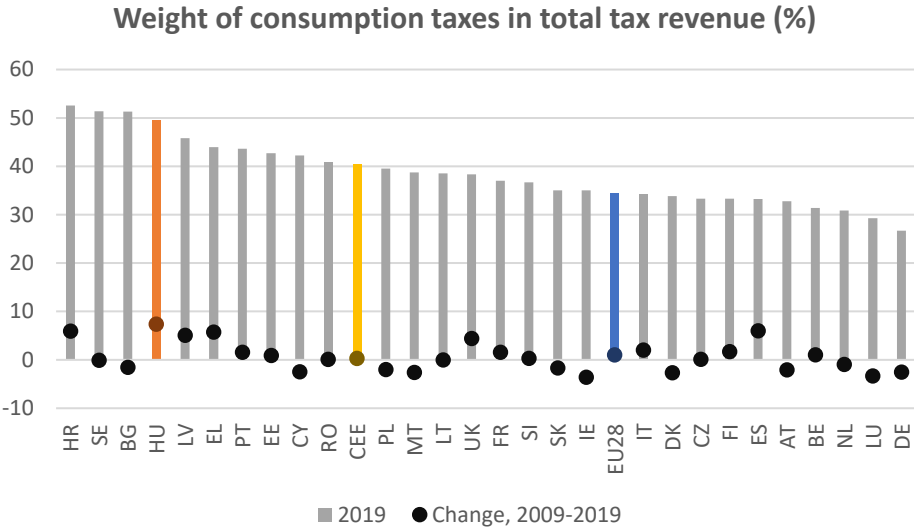
Source: Calculation of the Ministry of Finance

The reduction of VAT on new housing to 5% is a special measure because of certain specificities of the industry and the method of introduction. The importance of the construction sector is also justified by its weight in the national economy, its ability to absorb unskilled labour, its high domestic value added

rate and its key role in investment. However, an important characteristic of the industry is the highly procyclical nature of demand, as a result of which prolonged downturns are associated with a reduction in production capacities, slowing the recovery of investment even after the crises have passed. This capacity erosion was drastic in the period following the 2008 crisis, and the measure introduced was therefore did not serve a lasting fiscal policy objective, but specifically a re-launch of the industry. In this spirit, the measure was introduced on a temporary basis in the first place, and its phasing-out started at the end of 2019 as originally planned; however, the coronavirus crisis in early 2020 made it necessary to extend the measure again until 2022.

5.2.3 Snapshot: major changes may only be necessary in green taxes

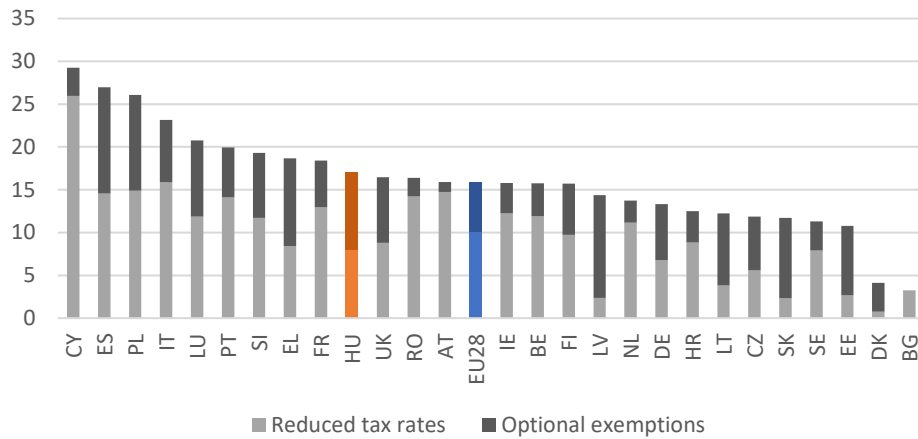
As a result of the measures taken in the 2010s, the relative weight of consumption-related tax revenues in total tax revenues in Hungary continued to increase, and is now the 4th highest among EU member states.



Source: Eurostat

According to the European Commission’s estimate based on an internationally comparable methodology, the loss of revenue because of reduced VAT rates is still below the EU average, despite recent targeted reductions in VAT rates, but above the EU average when taking into account the effects of optional exemptions granted by Member States.

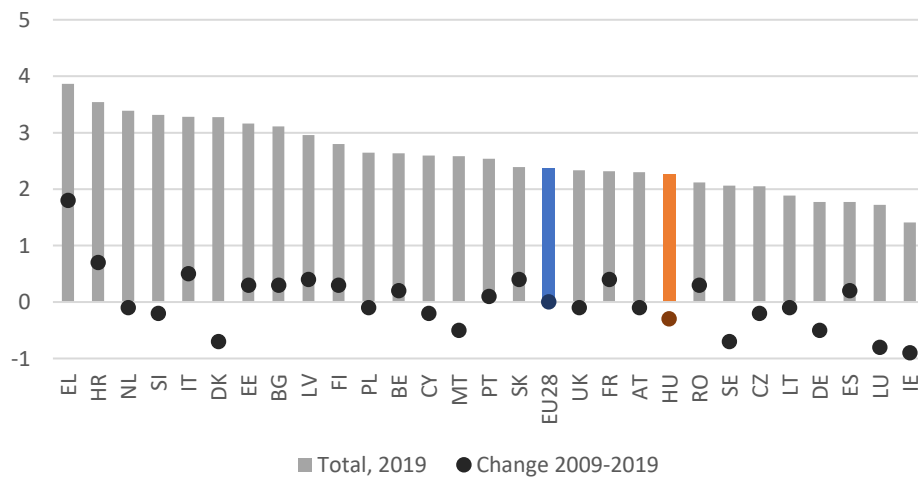
Revenue loss due to reduced VAT rates and optional exemptions, 2018 (%)



Source: CASE

However, despite the tax increases implemented, the share of revenue from green taxes as a percentage of GDP has still fallen slightly, partly because the volume of harmful activities underlying these taxes has grown less than GDP, and partly because under EU rules they are often based on the volume of activity, so the tax rate does not automatically follow inflation.

Environmental tax revenue as % of GDP



Source: Taxation trends

Protecting the consumption tax base is expected to remain an important key element of tax policy in the coming years, as the main source of revenue from consumption taxes, in addition to economic growth and an overall reduction in the level of redistribution, can provide the source of reductions in taxes on production. The source of the additional revenue needed for this purpose will be mainly the further whitening of the economy and the strengthening of incentives to discourage harmful activities. At the same time, where possible, the consolidation and simplification of different tax categories can occur in this area as well.

6. Tax administration and the grey economy

6.1 Theory: the administrative burden disproportionately affects SMEs

Tax administration imposes additional burdens on businesses without generating direct revenues for the public finances, so reducing them where possible is in the common interest of the state and economic operators. However, a frequent limitation to reducing administration is that finding the simplest solutions and coordinating data collection for similar purposes but with slightly different content requires carefully considered development, the design of substantive legislation that takes into account administrative aspects and the coordination of the activities of several public bodies.

The administrative burden on businesses is by its very nature very difficult to quantify (see box on measuring administrative costs). At the same time, several important lessons can be learnt from various surveys and estimates for developed countries:

- The administrative cost to taxpayers for income taxes varies between 2 and 10 percent of the tax revenue collected. In general, two thirds of this is the cost of own time, a quarter is consultancy fees and the rest is other external costs.
- For companies, the cost of administration (income tax, VAT, contributions) is highly size-dependent. For companies with less than 50 employees, the costs in proportion to the turnover have been estimated at 2-4% in most countries, which already significantly reduces profitability. For those with over 50 employees, this rate is typically below 0.5 percent, but the OECD 2001 survey showed rates as high as 3 percent in some cases. The administration of the burdens on employers is heavy strain almost everywhere (about half of the total burden according to the OECD, but others have found significantly different internal rates).
- The use of e-declaration channels is encouraged in many countries, usually with the aim of reducing administrative burdens. However, the experience of the survey on this issue shows that in most cases expectations are not met, as paper-based processes are maintained alongside electronic ones, and what is more, often data is requested in both ways at the same time. A further problem is that in addition to electronic data processing, the volume of information requested often increases, which makes any potential available reduction in the administrative burden null and void.

The lesson that can be learnt from the above is that the aspects of SMEs deserve particular attention when trying to achieve an effective administrative reduction. The use of digital solutions requires a series of well thought-out, successive developments, not only to replace the old paper-based solutions with a digital interface, but also to adapt the basic logic of data service to the opportunities offered by the new technology.

6.1.1.1 Box: measuring administrative costs

Although frequently studied and relevant in almost all countries, there is still no single standard for quantifying the administrative costs of taxation that provides internationally comparable results. Very simple approaches based on e.g. the number of tax categories, the length of laws or the number of boxes in tax returns are of very limited use for international comparisons, and can only provide lessons for the evolution of rules over time within countries. An interesting example is the Tax Simplification Office set up in the UK, which has developed a specific measure (from a weighted average of 10 indicators) to capture the complexity of regulation. The indicators include all of the approaches mentioned above, but are complemented by ones such as the Gunning Fog Readability Index, which estimates the number of years of schooling needed to understand a text first time, based on the length of sentences and the frequency of multi-syllable words. This was then used to review each of their

public burdens individually and make recommendations to rule-makers. One of their informative observations is that there are 198 different values (tax rate, threshold, limit) in 639 places in UK tax laws. The valorisation of these values generates constant change and can lead to distortions, so the organisation suggested that the aim should be to reduce the number of values in tax laws by standardising, reviewing their justification and possibly indexing them.

The fiscal approach, which takes into account the value of tax discounts and broadly defined tax expenditures, also provides useful information, but international comparisons are also extremely difficult because, despite the efforts of international organisations, the methodology for calculating tax expenditures is not uniform.

The estimation of administrative costs incurred by taxpayers and the assessment of these costs are also commonly used tools, but, although they often use a similar method, the Standard Cost Model, they tend to cover only one or two main tax categories and often only certain groups, and the approaches used to measure the time and quantify the costs are also highly heterogeneous.

The lessons from the study commissioned by the European Commission on the tax burden of VAT and corporate tax for SMEs in 20 countries show that administration is a major burden for smaller or start-up businesses, even if the costs are higher in absolute terms for large companies.¹⁶ The average burden associated with these two taxes is estimated at 2.4 percent of turnover, compared with less than 1 percent for large companies. It is noteworthy that the average varies significantly across countries (below 1 percent in Ireland and close to 4 percent in Poland). Within the administrative process, the collection of information represents the largest burden or cost. It should be stressed that the administrative burdens have hardly changed since the last survey in 2004 – in fact, there was almost unanimous agreement that it has increased since 2010 – despite, for example, the spread of electronic data service (93% of businesses in the 20 countries surveyed file at least one of their VAT and corporate tax returns in this way). It is possible that this is linked to the fact that small firms often outsource tax administration (the survey found that the administrative costs of firms using in-house solutions are 53 percent lower on the average) so that the benefits of electronic interfaces are not passed on to them but to accountants. An important finding is that there is often a disconnect between perceived and real administrative burdens. The communication, guidance and availability of the tax authority can reduce the perceived burden even if objective indicators still show high costs. Although the survey only covered VAT and corporate tax, the other taxes most frequently cited by respondents as the biggest burden were work-related taxes (PIT and contributions).

Closely linked to the efficiency of tax collection is the issue of the grey economy, the reduction of which is important not only to ensure budget revenues. Extensive tax evasion also undermines the efficiency of the economy through a number of channels. For example, tax avoidance can give less efficient businesses a competitive advantage over more efficient ones, preventing them from gaining a foothold and market clearing; fear of being caught can deter businesses from growing or from engaging in certain activities; and the concealment of real data can also reduce the transparency of companies to potential customers, making it more difficult for companies to sell.

In their tax avoidance decisions, taxpayers essentially weigh the gains from tax avoidance against the (perceived) risk of being caught and the size of the penalty. Reforms that increase the risk of being caught therefore not only directly generate additional revenue through better detection of fraud, but also contribute to improving tax compliance. The latter effect is often the most significant in terms of budgetary revenue.

¹⁶ KPMG (2018)

In addition to increasing the risk of being caught, there is of course also the possibility of modifying the other two factors, i.e. increasing the size of the penalties and reducing the tax advantage for tax avoidance. However, a limitation to increasing the penalties is that taxpayers are often unaware of the extent of the penalties, and if they see the likelihood of being caught as extremely low, they often do not really take into account the costs. As a compromise to reduce the tax advantage, many countries also make use of selective reductions in tax rates for the most affected actors, but this is a very unfair and distortive solution, and also complicates the tax system, and is only expedient if no better solution is available.

At the same time, the development of digital technologies over the past decades has provided tax authorities with really effective tools to reduce the grey economy, as evidenced by the improvement in the indicators of many countries.

6.2 Developments in the 2010s

6.2.1 Initial situation: significant deadweight loss

No detailed, internationally comparable indicators on the tax administration burden are available. For an international comparison, the “time spent on taxation” indicator from PWC’s “Paying taxes”, which is often criticised for methodological reasons, can be used, and it shows that the Hungarian administrative burdens are among the highest in the EU and in the region.



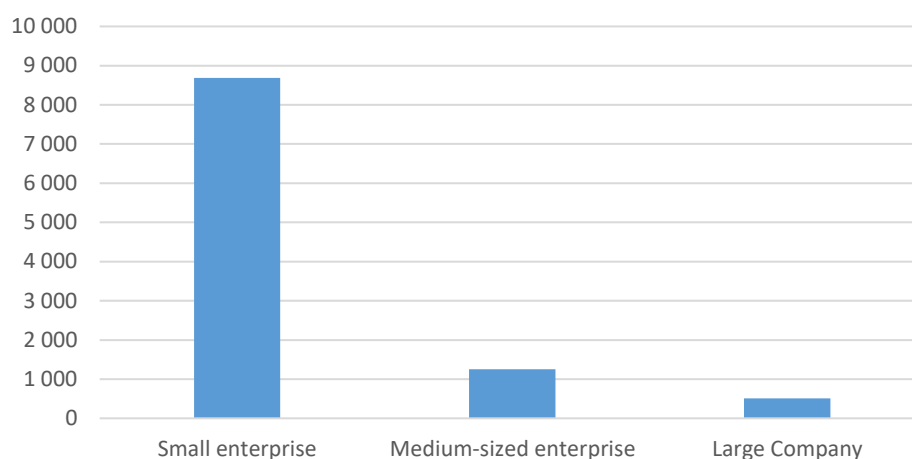
Source: *Paying Taxes*

However, Deloitte also carried out a more detailed study on the evolution of the administrative burdens in Hungary in 2009.¹⁷ It estimated the administrative burden on businesses at around 3.9-4.3 percent of GDP in 2008. Tax-related burdens accounted for over 40 percent of the total administrative burden, and accounting-related burdens were of a similar order of magnitude. Compared with other similar measurements, this study found this result to be one of the highest among the countries surveyed (with similar figures for Poland, Slovenia and Greece). The survey also confirmed that the largest share of the administrative burdens are associated with micro and small enterprises: a second analysis based on the survey found that the burden per capita was almost 17 times higher for small enterprises than for large companies.¹⁸

¹⁷ Deloitte (2009)

¹⁸ Reszkető-Váradí (2012)

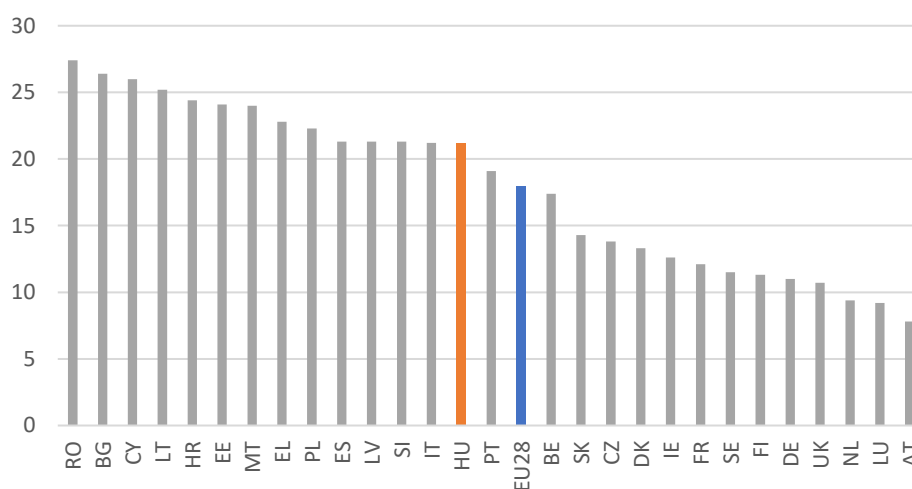
Administrative burden per capita (HUF)



Source: Reszkető-Váradi (2012)

There are also a limited number of reliable, internationally comparable indicators on the size of the grey economy. However, based on the known surveys, the typical picture is that the share of the grey economy relative to GDP in Hungary is above the EU average, but among the more favourable ones compared to other countries in the region.

Estimated share of the shadow economy in 2009 (%)



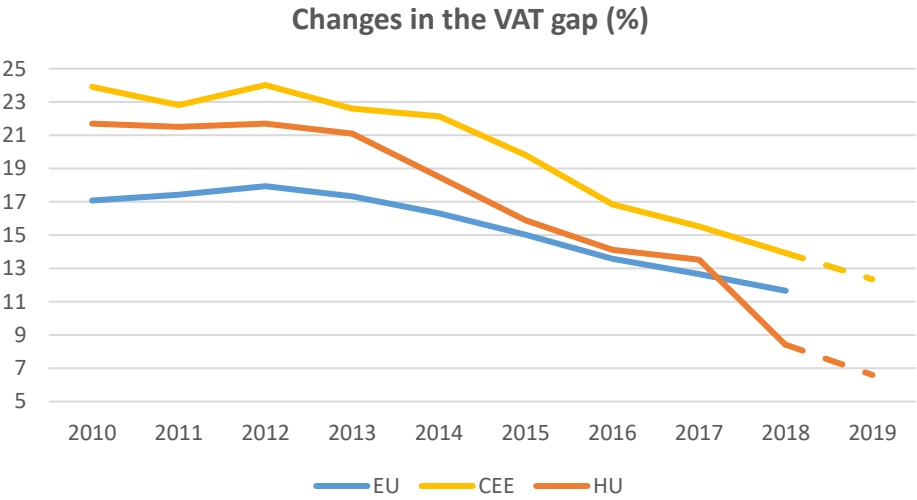
Source: Medina-Schneider (2019)

6.2.2 Directions and reforms: building the foundations for real-time taxation

In the 2010s, the government took advantage of the opportunities offered by technological developments to introduce a number of new measures that made it possible to collect a wide range of real-time data on economic processes. Among these, the introduction of online cash registers, the setting up of the EKÁER (Electronic Public Road Transportation Control System), the introduction of online invoice data provision and measures to promote electronic payments (e.g. POS terminal installation programme, exemptions from the financial transaction duty in retail payments) have had a notable impact at the level of the national economy. Real-time data collection significantly helps to filter out risky taxpayers and improve the targeting of controls.

As a result of these developments and the deterrent effect they have had, there has been a significant whitening of the economy. According to an estimate commissioned by the European Commission, the

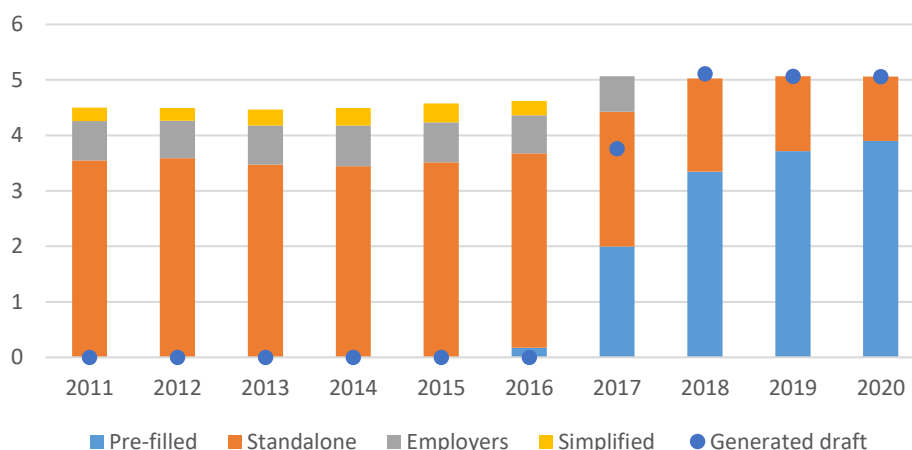
VAT gap (i.e. the amount of uncollected VAT as a share of total theoretical tax liability) has fallen from around 21-22 percent at the beginning of the decade to just 6 percent in 2019. The whitening has meant an increase in VAT revenue alone of around 1.5 percent of GDP year on year, allowing for a reduction in the rates of other taxes. In addition to the whitening of VAT receipts it also contributes to an increase in direct tax revenues, as it is much more difficult to make grey payments from revenues visible to the tax authorities.



Source: CASE

At the same time, the real-time data collected by the NTCA and IT developments have not only improved the efficiency of tax collection, but have also created opportunities for significant improvements in tax administration services. Building on the data provided by payers, NTCA has introduced pre-completed online personal income tax returns, which are now used by more than ¾ of taxpayers. The NTCA’s data collections and the interconnection of the various databases also create the possibility of devising tax discounts whose eligibility conditions can be checked by the NTCA on the basis of the data available, so that it can automatically offer them to those entitled to them (e.g. the allowance for entrants into the labour market). Also on the basis of the data available, the NTCA can assist in the selection of the suitable tax category. For example, it sends an annual notice to taxpayers eligible for the KIVA, who are expected to profit from it. Online invoice data provision can not only serve as a basis for the VAT returns offered in advance, but also as a common standard for the development of software that partially automates accounting.

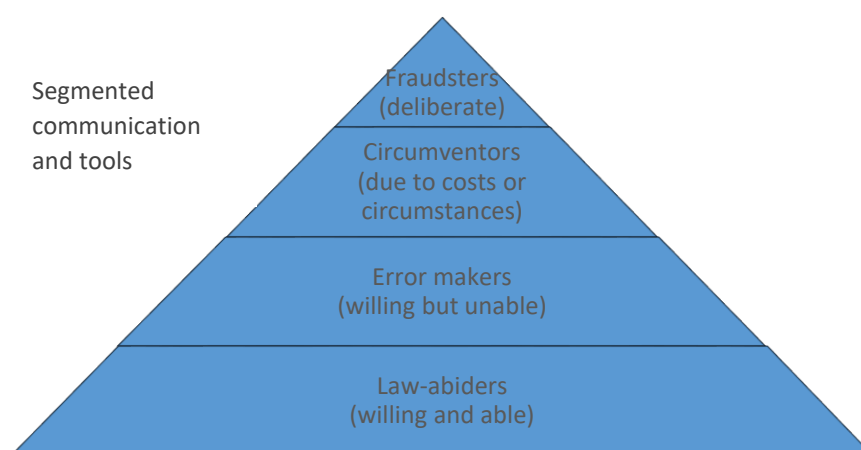
Distribution of submitted VAT returns (in millions)



Source: NTCA

In addition to IT developments, the transforming NTCA is also placing increasing emphasis on strengthening its service approach and helping taxpayers. A fundamental change in approach has been the NTCA’s conscious effort to distinguish between tax evaders and taxpayers who make mistakes against their will, and to help the latter to comply with the law rather than punish them. In addition, several campaigns have been launched in recent years, focusing on targeted information for potentially relevant taxpayers by certain rules and on making the language used to communicate with them more understandable. When devising campaigns, the results of behavioural economics were significantly drawn on, and in some cases control groups were set up alongside the target groups to measure their impact.¹⁹

Compliance pyramid



6.2.3 Snapshot: after sowing, before harvesting

The 2010s have been the most successful years in terms of tax collection in the context of whitening the economy. The reduction of the grey economy and a significant cut in the VAT gap laid the foundations for a number of other tax cuts and created a fairer playing field in many segments of the economy.

¹⁹ Horváth-Keresztély-Svraka-Tóth-Ván (2020)

As regards the improvement of tax authority services, the change of mindset by the tax authority has significantly improved its image, and the e-PIT system has made it much easier for private individuals to pay taxes; however, the publication of tools that will drastically reduce the administrative burden on businesses in the tax area is expected in the next period. The first pre-completed draft VAT return forms will therefore be available as early as 2021, and the framework will help taxpayers not only to complete their returns but also to compile the necessary analytics. The development of the electronic Employer Information Programme (eFIP) framework, which allows for the simplification and automation of employment-related data reporting, has also started. Building on the new standard for online invoices, introduced in 2020, a number of market software developments have also been launched that could significantly reduce the administrative burden of accounting.

7. Conclusion

In the 2010s, significant changes were made to the Hungarian tax system to restore competitiveness.

The focus of economic policy in the first half of the period was on addressing the adverse debt and labour market situation inherited from the previous decade, while in the second half of the period the focus shifted to boosting investment and increasing work productivity.

Changes to the tax system have focused on five main areas. While the started changes are still underway in a number of areas, significant progress has been made in each of these focus areas.

Reducing tax deductions has been a priority from the start, but the budgetary situation only allowed for major tax cuts in the second half of the decade. Even so, a significant improvement was achieved over the decade in international comparison, bringing tax deductions, previously high by regional standards, significantly closer to levels with our competitors.

The focus of tax revenues has shifted from income taxes to consumption taxes. This has also served to increase the competitiveness of the tax system, as consumption taxes tend to be less of a constraint on economic growth. While the budgetary situation in the first half of the decade made an increase in consumption tax rates and the introduction of new tax categories necessary, the second half of the decade was dominated by a reduction in income taxes.

The structure of taxes on labour income has been completely overhauled with the introduction of the single-rate family tax system, and the six-step wage agreement between the government and the private sector has started a long-term, predictable process of tax cuts. The structural adjustment was accompanied by the introduction of new, better targeted employment incentives. The changes have contributed to positive labour market developments and have also significantly reduced incentives for grey employment and income concealment. By the end of the tax reduction programme, the tax burden on wages in Hungary will be competitive by regional standards.

Corporate taxes have also been cut and restructured to encourage investment. The favourable measures have focused mainly on exportable sectors of high priority for growth and on small and medium-sized enterprises. The structural changes have focused on better incentives for investment activity and reinvesting profits. The success of the reconstruction is confirmed by the evolution of investment and competitiveness rankings.

The main way to improve the efficiency of tax collection is through digitalisation and the exploitation of real-time data collection. As a result, tax concealment has been significantly reduced, as confirmed by the European Commission's VAT gap estimate. The wealth of data collected by the new tools also provides an opportunity to improve the services provided by the tax office, which could lead to a significant transformation and simplification of tax administration in the coming years.

In addition to other factors, the changes to the tax system outlined above have largely contributed to Hungary entering the 2020 decade with much more favourable equilibrium, growth, employment and investment indicators than 10 years earlier. With regard to long-term trends, the COVID-19 crisis does not require a correction, and competitiveness factors may even become more important in the process of global economic rebalancing in the context of recovery.

Bibliography

ALEKSANDRA RIEDL & SILVIA ROCHA-AKIS (2012), „How elastic are national corporate income tax bases in OECD countries? The role of domestic and foreign tax rates," *Canadian Journal of Economics/Revue canadienne d'économique*, John Wiley & Sons, vol. 45(2), pages 632-671, May.

BAKOS P. & BENCZÚR P. & BENEDEK D. (2008): „Az adóköteles jövedelem rugalmassága. Becslés és egy egykulcsos adórendszerre vonatkozó számítás a 2005. évi magyar adóváltozások alapján”, *Közgazdasági Szemle*. LV. évf. 9. sz. 733–762. old.

BENCZÚR PÉTER & KÁTAY GÁBOR & KISS ÁRON (2012), „A magyar adó- és transzferrendszer változásainak elemzése általános egyensúlyi mikroszimulációs modell segítségével”, MNB Working Paper 2012/07.

BENEDEK, D. ET. AL. (2015). „Estimating VAT Pass Through”, IMF Working Paper.

BENZARTI, Y. ET AL. (2017). „What Goes Up May Not Come Down: Asymmetric Incidence of Value-Added Taxes”, NBER Working Paper, No. 23849.

BRYNS, BERT (2011), „Making Fundamental Tax Reform Happen”, OECD Taxation Working Papers, No. 3, OECD Publishing, Paris.

CASE (2020), „Study and reports on the VAT gap in the EU-28 Member States”, CASE, Directorate-General for Taxation and Customs Union (European Commission), Economisti Associati.

DELOITTE (2009), „Áttekintő vizsgálat az államigazgatási szabályozásból fakadó vállalkozói adminisztratív terhek teljes köréről, illetve egyes fókuszterületekkel kapcsolatosan részletes felmérések elkészítése”, Zárótanulmány.

DWENGER, NADJA & STEINER, VIKTOR (2012), „Profit Taxation and the Elasticity of the Corporate Income Tax Base: Evidence From German Corporate Tax Return Data," *National Tax Journal*, National Tax Association; *National Tax Journal*, vol. 65(1), pages 118-150, March.

ENRIQUE G. MENDOZA & LINDA L. TESAR & JING ZHANG (2014), „Saving Europe?: The Unpleasant Arithmetic of Fiscal Austerity in Integrated Economies," Working Paper Series WP-2014-13, Federal Reserve Bank of Chicago.

EUROPEAN COMMISSION (2020), „Taxation trends in the European Union”, Directorate-General for Taxation and Customs Union (European Commission).

FOURNIER, J. & Å. JOHANSSON (2016), „The Effect of the Size and the Mix of Public Spending on Growth and Inequality", OECD Economics Department Working Papers, No. 1344, OECD Publishing, Paris.

GRUBER, J. & RAUH, J. (2007), „How Elastic Is the Corporate Income Tax Base? Taxing Corporate Income in the 21st Century”, Cambridge University Press, 140–163. o.

GRUBER, J. & SAEZ, E. (2002): „The elasticity of taxable income: evidence and implications”, *Journal of Public Economics*. Vol. 84. No. 1. pp. 1–32

HORVÁTH KATALIN & KERESZTÉLY TIBOR & SVRAKA ANDRÁS & TÓTH PÉTER & VÁN BÁLINT (2020): „Viselkedéstudományi projektek az adóigazgatásban 2019”, Pénzügyminisztérium és NAV.

IMF (2015), „Fiscal Policy and Long-term Growth”, IMF Policy Paper.

JOUMARD, I. & M. PISU & D. BLOCH (2012), „Tackling income inequality: The role of taxes and transfers", *OECD Journal: Economic Studies*, vol. 2012/1.

- KISS, Á. & MOSBERGER, P. (2015): „The elasticity of taxable income of high earners: evidence from Hungary”, *Empirical Economics*. Vol. 48. No. 2. pp. 883–908.
- KPMG (2018), „Study on tax compliance costs for SMEs – final report”, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) — COSME Programme, European Commission.
- LAKNER, CHRISTOPH & MILANOVIC, BRANKO (2013), „Global Income Distribution : From the Fall of the Berlin Wall to the Great Recession”, Policy Research Working Paper;No. 6719. World Bank, Washington, DC. © World Bank.
- MATHIAS TRABANDT & HARALD UHLIG (2012), „How Do Laffer Curves Differ across Countries?,” NBER Chapters, in: *Fiscal Policy after the Financial Crisis*, pages 211-249, National Bureau of Economic Research, Inc.
- MEDINA, LEANDRO & SCHNEIDER, FRIEDRICH G. (2019), „Shedding Light on the Shadow Economy: A Global Database and the Interaction with the Official One”. CESifo Working Paper No. 7981.
- MIRRLEES, J. A. ET AL. (2011), „Tax by Design”, Oxford University Press.
- OECD (2018), „Taxation of Household Savings”, *OECD Tax Policy Studies*, No. 25, OECD Publishing, Paris.
- OECD (2020), „Taxing Wages 2020”, OECD Publishing, Paris.
- OECD/KIPF (2014), „The Distributional Effects of Consumption Taxes in OECD Countries”, *OECD Tax Policy Studies*, No. 22, OECD Publishing, Paris.
- VAN OUDHEUSDEN, P. (2010), „Fiscal Policy Reforms and Dynamic Laffer Effects,” Discussion Paper 2010-15, Tilburg University, Center for Economic Research.
- PETER ELEK & JANOS KOLLO & BALAZS REIZER & PETER A. SZABO (2012), „Detecting Wage Under-Reporting Using a Double Hurdle Model”, *Budapest Working Papers on the Labour Market 1201*, Institute of Economics, Centre for Economic and Regional Studies.
- PWC (2019), „Paying Taxes 2020”, PwC & World Bank Group.
- RESZKETŐ PETRA & VÁRADI BALÁZS (2012), „Vállalkozásokat érintő adminisztratív terhek, versenypolitikai következmények”, *Pázmány Law Working Papers 2012/27*.
- STRULIK, HOLGER & TRIMBORN, TIMO (2010), „Laffer Strikes Again: Dynamic Scoring of Capital Taxes,” *Hannover Economic Papers (HEP) dp-454*, Leibniz Universität Hannover, Wirtschaftswissenschaftliche Fakultät.
- SVRAKA ANDRÁS (2019), „A munkaerőköltség csökkentésének hatása a sérülékeny csoportba tartozók foglalkoztatására”, *Pénzügyi Szemle 2019/1*.
- THOMAS, A. (2020), „Reassessing the regressivity of the VAT”, *OECD Taxation Working Papers*, No. 49, OECD Publishing, Paris.
- UHLIG, HARALD & TRABANDT, MATHIAS (2010), „How far are we from the slippery slope? The Laffer curve revisited,” *Working Paper Series 1174*, European Central Bank.
- VÁN BÁLINT & OLÁH DÁNIEL (2018), „Szerepel-e az áfacsökkentés az étlapon?”, *Pénzügyi Szemle 2018/3*.
- VARGA GERGELY & NOBILIS BENEDEK & SVRAKA ANDRÁS (2020), „Adóköteles jövedelmek rugalmassága – egy identifikációs kísérlet a családi adókedvezmény 2011-es bevezetése alapján”, *Statisztikai Szemle 98. évfolyam 1. szám*.